Naval Education and Training Command
NAVEDTRA 43355-F
September 2008

PERSONNEL

QUALIFICATION

STANDARD

INFORMATION SYSTEMS AND TELECOMMUNICATIONS (COMMON)

NAME (Rate/Rank)_____

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NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

Although the words “he”, “him,” and “his” are used sparingly in this manual to enhance communication, they are not intended to be gender driven nor to affront or discriminate against anyone reading this material.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

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NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

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NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

INTRODUCTION

PQS PROGRAM

This PQS program is a qualification system for officers and enlisted personnel where certification of a minimum level of competency is required prior to qualifying to perform specific duties. A PQS is a compilation of the minimum knowledge and skills that an individual must demonstrate in order to qualify to stand watches or perform other specific routine duties necessary for the safety, security or proper operation of a ship, aircraft or support system. The objective of PQS is to standardize and facilitate these qualifications.

CANCELLATION

This Standard cancels and supersedes NAVEDTRA 43355-E.

APPLICABILITY

This PQS is applicable to all information systems and telecommunications units, afloat and ashore.

MODEL MANAGER

The Model Manager Command manages a specific PQS manual. This includes overseeing the process of monitoring and updating assigned PQS manuals from the standpoint of technical content and relevance within the community.

TAILORING

To command tailor this package, first have it reviewed by one or more of your most qualified individuals. Delete any portions covering systems and equipment not installed on your ship, aircraft or unit. Next, add any line items, fundamentals, systems and watchstations/workstations that are unique to your command but not already covered in this package. Finally, the package should be reviewed by the cognizant department head and required changes approved by the Commanding Officer or his designated representative. Retain the approved master copy on file for use in tailoring individual packages.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

INTRODUCTION (CONT'D)

QUALIFIER

The PQS Qualifier is designated in writing by the Commanding Officer to sign off individual watchstations. Qualifiers will normally be E-5 or above and, as a minimum, must have completed the PQS they are authorized to sign off. The names of designated Qualifiers should be made known to all members of the unit or department. The means of maintaining this listing is at the discretion of individual commands. For more information on the duties and responsibilities of PQS Qualifiers, see the PQS Unit Coordinator's Guide.

CONTENTS

PQS is divided into three sections. The 100 Section (Fundamentals) contains the fundamental knowledge from technical manuals and other texts necessary to satisfactorily understand the watchstation/workstation duties. The 200 Section (Systems) is designed to acquaint you with the systems you will be required to operate at your watchstation/workstation. The 300 Section (Watchstations) lists the tasks you will be required to satisfactorily perform in order to achieve final PQS qualification for a particular watchstation/workstation. All three sections may not apply to this PQS, but where applicable, detailed explanations are provided at the front of each section.

REFERENCES

The references used during the writing of this PQS package were the latest available to the workshop; however, the most current references available should be used when qualifying with this Standard.

NOTES

Classified references may be used in the development of PQS. If such references are used, handle accordingly if notes are made in this book.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

INTRODUCTION (CONT'D)

TRAINEE

Your supervisor will tell you which watchstations/workstations you are to complete and in what order. Before getting started, turn to the 300 Section first and find your watchstation/workstation. This will tell you what you should do before starting your watchstation/workstation tasks. You may be required to complete another PQS, a school, or other watchstations/workstations within this package. It will also tell you which fundamentals and/or systems from this package you must complete prior to qualification at your watchstation/workstation. If you have any questions or are unable to locate references, contact your supervisor or qualifier. Good luck!

PQS FEEDBACK REPORTS

This PQS was developed using information available at the time of writing. When equipment and requirements change, the PQS needs to be revised. The only way the PQS Development Group knows of these changes is by you, the user, telling us either in a letter or via the Feedback Report contained in the back of this book. You can tell us of new systems and requirements, or of errors you find.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

SUMMARY OF CHANGES

CHANGES TO FUNDAMENTALS, SYSTEMS, AND WATCHSTATIONS:

Fundamental Title	Action	Comment
Security	Modified	Updated
Message Text Format/Handling	Modified	
Voice Operations	Added	
Call Signs	Deleted	Added to Voice Operations
Special Circuit	Modified	Changed name to Common Circuits
Distress Communications	Modified	Changed name to Distress Circuits
Satellite Communications (SATCOM)	Deleted	
Ultra High Frequency (UHF) Satellite Communications (SATCOM)	Added	
Demand Assigned Multiple Access (DAMA)/Time division Multiple Access (TDMA)	Deleted	Added to UHF SATCOM
Super High Frequency (SHF) Satellite Communications (SATCOM)	Modified	
Circuits	Modified	Changed to Basic Circuits
Micro Computer	Deleted	Added to Hardware and Software
Hardware and Software	Added	
AIS	Deleted	Added to Networking and Hardware and Software
Networking	Added	
CENTRIXS	Added	
DMS	Added	
NTCSS	Added	
NOC	Added	
CWO	Modified	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

SUMMARY OF CHANGES (CONT'D)

System Title	Action	Comment
NOW Terminal Set	Deleted	Added to all data systems
Automated Digital Network System (ADNS)	Deleted	Has own PQS
All Antenna Coupler Groups	Deleted	Added to multiple systems
Switch Boards	Deleted	Added to multiple systems
Direct Current Patch Panel	Deleted	Obsolete
SA-2112A(V) /STQ Single Audio System (SAS) Black	Modified	Added HFRG system
Transmitters (all)	Deleted	Added to multiple systems
Receivers (all)	Deleted	Added to multiple systems
Transceivers (all)	Deleted	Added to multiple systems
FCC-100 Multiplexer	Deleted	Added to SHF system
Converters (all)	Deleted	Added to multiple systems
Amplifiers (all)	Deleted	Added to multiple systems
Crypto Equipment	Deleted	Added to COMSEC Equipment Operator
SSR-1 Satellite Signal Receiving Set	Deleted	Added to Broadcast Systems
AN/WSC-6 Super High Frequency (SHF) Satellite Communications (SATCOM) Set	Modified	Name changed to DSCS and updated
Ultra High Frequency (UHF) Teletypewriters	Modified	Name changed to UHF Radio Teletypewriter (Type B/C) Combined single and duplex
HF Teletypewriters	Modified	Name changed to HF Radio Teletypewriter (Type D/G) Combined single and duplex
Fleet Multichannel Broadcast	Modified	Added High Speed Fleet Broadcast
SSQ-88 Shipboard Communications Quality Monitoring	Modified	Name changed to Shipboard Communications Quality Monitoring System
USC-38 Extremely High Frequency (EHF) Satellite Communications (SATCOM)	Modified	Added multiple subsystems
High Speed Fleet Broadcast	Deleted	Added to Fleet Multichannel Broadcast
CQM-248 Comquest Digital Satellite Modem	Deleted	Added to multiple SATCOM systems
Demand Assigned Multiple Access (DAMA)	Deleted	Added to UHF SATCOM
Automated Network Control Center (ANCC)	Added	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

SUMMARY OF CHANGES (CONT'D)

AN/USQ-155(V)1 Tactical Variant Switch (TVS)	Added	
AN/WSC-8 Commercial Wideband Satellite Program (CWSP)	Added	
AN/USR-10(V) Global Broadcast System (GBS)	Added	
ST-1000	Added	
Link/2+	Added	
Local Area Network (LAN)	Deleted	Added to ISNS and Networking
ISNS	Added	
Networking	Added	
Combined Enterprise Regional Information Exchange System (CENTRIXS)	Added	
Collaboration at Sea (CAS)	Added	
Defense Messaging Dissemination System (DMDS)	Added	
Global Control and Command System - Maritime (GCCS-M)	Added	
AN/USQ 119A	Modified	Changed name to Naval Tactical Command Support Systems (NTCSS)

Watchstation Title	**Action**	**Comment**
COMSEC Equipment Operator	Modified	Added and removed equipment
Fleet Broadcast Operator	Deleted	Added to multiple SATCOM watchstations
Satellite Communications (SATCOM) System Operator	Deleted	Divided into UHF, EHF, and SHF watchstations
Tactical Transmitter/Receiver/ Transceiver Operator	Modified	
Voice System Operator	Deleted	Moved to fundamentals
Terminations System Operator	Modified	
Information Watch Supervisor	Modified	Original section changed name to Message Processing Supervisor – New section added for Information Systems
Transmission System Technician (TST) Supervisor	Modified	
Media Clerk	Modified	
AIS Operator	Deleted	Added to Helpdesk Technician and Network Operator
Helpdesk Technician	Added	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

SUMMARY OF CHANGES (CONT'D)

Helpdesk Supervisor	Added
Defense Messaging System (DMS) Operator	Added
Network Operator	Added
Network Administrator	Modified
CWO	Modified

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

WATCHSTATION REQUALIFICATIONS

WATCHSTATION REQUALIFICATIONS

Due to changes in policies, systems, or procedures, personnel dealing with the subject matter of this PQS may be required to requalify IAW NAVEDTRA 43100.1, PQS Unit Coordinator's Guide.

The following watchstations regardless of qualifications achieved in previous versions, and/or other platforms/commands shall be completed.

305	Message Processing Center (MPC) Supervisor
306	Tactical Transmitter/Receiver/Transceiver Operator
307	UHF Satellite Communications (SATCOM) Operator
308	EHF Satellite Communications (SATCOM) Operator
309	SHF Satellite Communications (SATCOM) Operator
311	Transmission System Technician (TST) Supervisor
316	Network Administrator
317	Information Watch Supervisor
318	Communications Watch Officer (CWO)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

ACRONYMS USED IN THIS PQS

Not all acronyms or abbreviations used in this PQS are defined here. The Subject Matter Experts from the Fleet who wrote this Standard determined the following acronyms or abbreviations may not be commonly known throughout their community and should be defined to avoid confusion. If there is a question concerning an acronym or abbreviation not spelled out on this page nor anywhere else in the Standard, use the references listed on the line item containing the acronym or abbreviation in question.

ABT	Automatic Bus Transfer
AGC	Automatic Gain Control
ASR	Automatic Send Receive
BFO	Beat Frequency Oscillator
BIT	Built-In Test
CCOW	Channel Control Order Wire
CEWN	Command Early Warning Net
CIA	Communications Information Advisory
CIB	Communications Information Bulletin
COMMPLAN	Communications Plan
COMSEC	Communications Security
COMSPOT	Communications Spot Report
CPS	Cycles Per Second
CSS	Command Switching System
DCMA	Distributed Control Mode Alternate
DUSC	Directory Update and Service Center
DWTS	Digital Wideband Transmission System
EAM	Emergency Action Messages
EAP	Emergency Action Plan
EMI	Electromagnetic Interference
FMX	Fleet Message Exchange
FRR	Fast Reaction Response
FSM	Fleet SIPRNET Messaging
HFRG	High Frequency Radio Group
INMARSAT	International Maritime Satellite
ITP	Information Transmission Protocol
LIMDIS	Limited Distribution
LPI	Low Probability of Intercept
LRI	Limited Range of Intercept
LSB	Lower-Sideband

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

ACRONYMS USED IN THIS PQS (CONT'D)

MBT	Manual Bus Transfer
MCPP	Multichannel Patch Panel
MMT	Mail Message Terminal
MPC	Media Processing Center
MSL	Master Station Log
NES	Net Encrypted System
NOW	Navy Order Wire
NWPL	Naval Warfare Publications Library
OPORD	Operations Orders
OPTASK	Operational Task
OTAR	Over the Air Rekey
OTAT	Over the Air Transmission
PC	Personal Computer
PPL	Preferred Products List
RADAY	Radio Day
RAPP	Receive Antenna Patch Panel
RESDAT	Restricted Data
RRI	Remote Request Interface
SCI	Sensitive Compartmented Information
SDD	Secure Data Device
SIU	SINCGARS Interface Unit
SMS	Single Messaging Solution System
SPECAT	Special Category
SRCS	Secure Remote Control Set
STANAG	Standing NATO Agreement
STS	Secure Telephone System
STU	Secure Telephone Unit
SVPA	Secure Voice Phone Assembly
TSS	Tactical Switching System
VIXS	Video Information Exchange System
VMEC	Versa Module Eurocard Chassis
VSWR	Voltage Standing Wave Ratio

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

100 INTRODUCTION TO FUNDAMENTALS

100.1 INTRODUCTION

This PQS begins with a Fundamentals section covering the basic knowledge and principles needed to understand the equipment or duties to be studied. Normally, you would have acquired the knowledge required in the Fundamentals section during the school phase of your training. If you have not been to school or if you need a refresher, the references listed at the beginning of each fundamental will aid you in a self-study program. All references cited for study are selected according to their credibility and availability.

100.2 HOW TO COMPLETE

The fundamentals you will have to complete are listed in the watchstation (300 section) for each watchstation. You should complete all required fundamentals before starting the systems and watchstation portions of this PQS, since knowledge gained from fundamentals will aid you in understanding the systems and your watchstation tasks. When you feel you have a complete understanding of one fundamental or more, contact your Qualifier. If you are attempting initial qualification, your Qualifier will expect you to satisfactorily answer all line items in the fundamentals. If you are requalifying or have completed the appropriate schools, your Qualifier may require you to answer representative line items to determine if you have retained the necessary knowledge for your watchstation. If your command requires an oral board or written examination for final qualification, you may be asked any questions from the fundamentals required for your watchstation.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

101 SAFETY PRECAUTIONS FUNDAMENTALS

References:

[a] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[b] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual
[c] OPNAVINST 3500.39B, Operational Risk Management (ORM)

101.1 Explain how various levels of current can affect the body.
[ref. a, vol. II, ch. C9; ref. b, ch. 20]

_____
(Signature and Date)

.2 Explain how variations in environmental conditions affect the body's resistance to electrical current. [ref. a, vol. II, ch. D5]

_____
(Signature and Date)

.3 Explain how electrical shock can be prevented when working on an energized circuit. [ref. a, vol. II, ch. C9]

_____
(Signature and Date)

.4 Explain how insulating material is used to protect personnel.
[ref. a, vol. II, chs. D5, D7; ref. b, ch. 5]

_____
(Signature and Date)

.5 Describe the proper procedures to be observed when using test equipment on energized circuits. [ref. a, vol. I, ch. B7]

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

101 SAFETY PRECAUTIONS FUNDAMENTALS (CONT'D)

101.6 Describe the proper procedures to be followed prior to working on electrical machinery or equipment. [ref. a, vol. II, ch. C9]

_____
(Signature and Date)

.7 Explain how a shorting probe is used to discharge electrical components. [ref. a, vol. II, ch. C9]

_____
(Signature and Date)

.8 Explain the use of interlocks installed in/on electrical equipment. [ref. a, vol. II, ch. C9]

_____
(Signature and Date)

.9 Explain the purpose and use of tag-out procedures. [ref. a, vol. I, chs. B7, B11, vol. II, chs. C22, D5; ref. b, ch. 24]

_____
(Signature and Date)

.10 Describe the procedure for replacing fuses by using fuse pullers. [ref. a, vol. I, ch. B11, vol. II, ch. C9]

_____
(Signature and Date)

.11 Describe the safety precautions applicable to portable electrical equipment. [ref. a, vol. I, ch. B7]

_____
(Signature and Date)

.12 Discuss the potential dangers of open electrical circuits in adverse environmental conditions. [ref. a, vol. I, ch. A6]

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

101 SAFETY PRECAUTIONS FUNDAMENTALS (CONT'D)

101.13 Explain the procedures to be followed when fighting an electrical fire. [ref. a, vol. II, ch. C9]

_____
(Signature and Date)

.14 Name the agents used to fight electrical fires, explaining the proper application of each. [ref. a, vol. II, ch. C9]

_____
(Signature and Date)

.15 Explain the desirable characteristics of a good cleaning agent for electrical equipment. [ref. a, vol. I, ch. B12]

_____
(Signature and Date)

.16 Describe the hazards that can be encountered with cleaning agents in adverse environmental conditions. [ref. a, vol. I, ch. B12, vol. II, ch. C20]

_____
(Signature and Date)

.17 Describe the hazards associated with lithium batteries. [ref. a, vol. II, ch. C9]

_____
(Signature and Date)

.18 Describe the procedures for handling, stowing, and disposing of lithium batteries. [ref. a, vol. II, ch. C9]

_____
(Signature and Date)

.19 Discuss procedures for personnel working aloft. [ref. a, vol. II, chs. C8, C18, D4]

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

101 SAFETY PRECAUTIONS FUNDAMENTALS (CONT'D)

101.20 State the procedures for removing a victim from an energized circuit. [ref. a, vol. II, chs. C9, D5]

_____
(Signature and Date)

.21 State the first aid procedures for electrical shock. [ref. a, vol. II, chs. C9, D5]

_____
(Signature and Date)

.22 Discuss the concept of ORM. [ref. c]

_____
(Signature and Date)

.23 Explain the following as they apply to ORM: [ref. c]

a. Identifying hazards
b. Assessing hazards
c. Making risk decisions
d. Implementing controls
e. Supervising

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

102 SECURITY FUNDAMENTALS

References:

[a] NAVEDTRA 14222, Information Systems Technician Training Series, Module 1-Administration and Security
[b] NWP 6-01 (Rev. A), Basic Operational Communications Doctrine
[c] Local Security Instructions
[d] SECNAVINST 5510.30A, Department of the Navy (DON) Personnel Security Program (PSP) Instruction
[e] SECNAVINST 5510.36, Department of the Navy (DON) Information Security Program (ISP) Instruction
[f] EKMS 1A Phase 4, CMS Policy and Procedures for Navy Electronic Key Management System Tiers 2&3
[g] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications
[h] SECNAVINST M5239.1, Department of the Navy Information Assurance Program, Information Assurance Manual
[j] Department of the Navy Information Assurance Publication Module 5239-26

102.1 Discuss the following:

a. Security area [ref. a, ch. 5]
b. Security clearance [ref. d, ch. 8]
c. Need to know [ref. d, ch. 9]
d. Access [ref. d, ch. 9]
e. AIS security [ref. a, ch. 4]
f. Classification [ref. d, ch. 9]
g. Classified information [ref. a, ch. 4]
h. Compromise [ref. d, Annex A]
i. Classification Marking [ref. a, ch. 5; ref. e, ch. 6]
j. Downgrading/declassification procedures [ref. e, ch. 4]
k. COMSEC/EKMS [ref. f, ch. 1]
l. Two-person integrity [ref. a, ch. 3]
m. Malicious code protection [ref. h, ch. 4]
n. Spillage incident reporting [ref. i, app. c]

_____
(Signature and Date)

.2 Discuss the roles and responsibilities of the following: [ref. h, ch. 2]

a. CO/OIC
b. Information Assurance Manager
c. Information Assurance Officer
d. SSO

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

102 SECURITY FUNDAMENTALS (CONT'D)

102.3 Discuss the following warning notices and the handling requirements for each:

a. Formerly restricted data [ref. a, ch. 5]
b. NOFORN [ref. a, ch. 5]
c. EFTO [ref. a, ch. 5]
d. FOUO [ref. a, ch. 5]
e. Personal for [ref. b, ch. 8]
f. Exclusive for [ref. b, ch. 8]
g. SPECAT [ref. g, ch.3]
h. LIMDIS [ref. g, ch. 3]
i. CRITIC [ref. g, ch. 3]

_____
(Signature and Date)

.4 Discuss storage requirements in terms of the following:

a. Standards for storage equipment [ref. e, ch. 10]
b. Storing classified material (national and NATO) [ref. a, ch. 5]
c. Designations and combinations [ref. a, ch. 5]
d. Care during working hours [ref. a, ch. 5]
e. Care after working hours [ref. a, ch. 5]
f. Emergency planning [ref. a, ch. 5]

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(Signature and Date)

.5 Define the following security areas: [ref. a, ch. 5]

a. Exclusion
b. Limited
c. Controlled
d. Restricted

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(Signature and Date)

.6 State the responsibility of the person who discovers a compromise or a suspected compromise. [ref. c]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

102 SECURITY FUNDAMENTALS (CONT'D)

102.7 State the accountability requirements for Top Secret and SPECAT. [ref. a, ch. 5; ref. c]

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(Signature and Date)

.8 State the rules for the following as applied to classified material: [ref. a, ch. 5]

a. Method of destruction
b. Records of destruction
c. Classified waste
d. Emergency destruction
e. Priority of emergency destruction
f. Method of emergency destruction
g. Destruction of burn bags

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(Signature and Date)

.9 State the destruction rules of COMSEC material as applied to the following: [ref. a, ch. 3]

a. Methods of routine destruction
b. Records of destruction
c. Emergency destruction
d. Priority of emergency destruction
e. Method of emergency destruction
f. Reports of emergency destruction

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(Signature and Date)

.10 State the requirements of the command EAP in regard to the following: [ref. c]

a. Authority to carry out the EAP
b. Personnel actions and responsibilities
c. Follow up procedures and reports to higher authority

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

103 POWER DISTRIBUTION FUNDAMENTALS

References:

[a] Ship's Electronic Casualty Plan
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)

103.1 Discuss the power distribution panels associated with your communications spaces. [refs. a thru c]

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(Signature and Date)

.2 Discuss the following: [refs. a thru c]

a. ABT
b. MBT
c. 400 Hz power
d. 60 Hz power
e. Circuit breakers
f. UPS
g. Emergency cutout switch`

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

104 PUBLICATIONS FUNDAMENTALS

References:

[a] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications, Ch. 1
[b] NAVEDTRA 14222, Information Systems Technician Training Series, Module 1-Administration and Security, Ch. 2

104.1 Discuss the following as applied to the NWPL: [refs. a, b]

a. Accountability
b. Changes and corrections
c. Identification and procurement
d. Page checks
e. Watch to watch inventory
f. Color codes

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

105 LOGS AND FILES FUNDAMENTALS

References:

[a] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications
[b] NAVEDTRA 14222, Information Systems Technician Training Series, Module 1-Administration and Security

105.1 Describe and identify the following logs and files:

a. Broadcast file [ref. a, ch. 4]
b. General message file [ref. a, ch. 4]
c. Broadcast check off log [ref. a, ch. 4]
d. Circuit logs [ref. a, ch. 4]
e. Watch-to-watch inventory [ref. a, ch. 5]
f. Visitor's log [ref. a, ch. 4]
g. Communications Center file [ref. a, ch. 4]
h. Radio Station file [ref. a, ch. 4]
i. Outgoing log [ref. b, ch. 4]
j. Historical file [ref. b, ch. 2]
k. Central message log (dupe log) [ref. b, ch. 2]
l. Tracer/Service file [ref. a, ch. 10]
m. Trouble Report log [ref. b, ch. 2]
n. Status board [ref. a, ch. 6]
o. Supervisor's log (MSL) [ref. a, ch. 4]
p. Communications Information Bulletin file [ref. a, ch. 6]

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(Signature and Date)

.2 Discuss security requirements and retention periods of logs and files. [ref. a, ch. 4; ref. b, ch. 2]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

106 MEDIA FUNDAMENTALS

References:

[a] Local Standard Operating Procedures (SOP)
[b] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications
[c] NAVEDTRA 14222, Information Systems Technician Training Series, Module 1-Administration and Security
[d] NAVEDTRA 14223, Information Systems Technician Training Series, Module 2-Computer Systems
[e] SECNAVINST 5510.36, Department of the Navy (DON) Information Security Program (ISP) Instruction
[f] NTP 3 (K), Naval Telecommunications Users Manual
[g] NAVEDTRA 14194, Navy Electricity and Electronics Training Series Module 22-Introduction to Digital Computers

1 Discuss the following as applied to message distribution: [ref. a]

a. Advance copy routing
b. Internal routing
c. Routing

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(Signature and Date)

.2 Discuss the special requirements for handling the following:

a. Top Secret [ref. a]
b. Secret [ref. a]
c. SPECAT [ref. a; ref. c, ch. 5]
d. LIMDIS [ref. a; ref. c, ch. 4]
e. Personal For [ref. a; ref. c, ch. 5]
f. AMCROSS [ref. a; ref. b, ch. 3]
g. Multipage/section messages [ref. a]
h. General messages [ref. a]
i. CIB/CIA [refs. a, b]
j. Restricted data [ref. a; ref. c, chs. 2, 5]
k. NOFORN [ref. a; ref. e, ch. 6]
l. NATO [ref. b, ch. 5]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

106 MEDIA FUNDAMENTALS (CONT'D)

106.3 Discuss the following procedures as they apply to message distribution on magnetic media:

a. Delivery of message on diskette [ref. a]
b. Courier authorization [ref. e, ch. 9]
c. Care of magnetic media [ref. d, ch. 2]
d. Security markings and handling of diskettes [ref. c, ch. 5]

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(Signature and Date)

.4 Discuss and define the following terms:

a. Magnetic storage media [ref. d, ch. 2]
b. Off site disaster files [ref. d, ch. 2]
c. BPI [ref. g, ch. 2]
d. Bytes [ref. d, ch. 1]
e. ASCII [ref. g, ch. 4]
f. EBCDIC [ref. g, ch. 3]
g. Catalog [ref. d, ch. 3]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

107 MESSAGE TEXT FORMAT/HANDLING FUNDAMENTALS

References:

[a] NAVEDTRA 14222, Information Systems Technician Training Series, Module 1-Administration and Security
[b] NTP 3 (K), Naval Telecommunications Users Manual
[c] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications, Ch. 4
[d] ACP 126 (C), Communications Instructions Teletypewriter (Teleprinter) Procedures
[e] NWP 6-01 (Rev. A), Basic Operational Communications Doctrine
[f] ACP 131(F), Communications Instructions Operating Signals
[g] NAVEDTRA 14226, Information Systems Technician Training Series, Module 5-Communications Center Operations
[h] JANAP 128(J), Automatic Digital Network (AUTODIN) Operating Procedures

107.1 Define and discuss the following terms and abbreviations:

a. AIG [ref. a, ch. 2]
b. CAD [ref. c, Annex B]
c. OPSIGS [ref. b, ch. 2]
d. SHD [ref. b, ch. 5]
e. PLA [ref. b, ch. 5]
f. CIC [ref. b, ch. 5]
g. LMF [ref. b, ch. 5]
h. SSN [ref. b, ch. 5]
i. FL [ref. b, ch. 7]
j. DUPE [ref. g, ch. 1]
k. OSRI [ref. b, ch. 3]
l. SUSDUPE [ref. g, ch. 1]
m. SSIC [ref. b, ch. 7]
n. DPVS [ref. b, ch. 1]
o. SVC [ref. c, ch. 4]
p. TOF [ref. c, ch. 2]
q. TOR [ref. c, ch. 4]
r. TOD [ref. c, ch. 4]
s. TRC [ref. c, ch. 4]
t. BT [ref. c, ch. 4]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

107 MESSAGE TEXT FORMAT/HANDLING FUNDAMENTALS (CONT'D)

107.2 State the three main parts of a message. [ref. c, ch. 8]

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(Signature and Date)

.3 Define and identify the following message elements:

a. Service/tracer message [ref. c, ch. 4]
b. Originator [ref. c, ch. 4]
c. Text [ref. c, ch. 4]
d. Passing instructions [ref. b, ch. 4]
e. Releaser [ref. c, ch. 4]
f. Drafter [ref. c, ch. 4]
g. Message cancellation [ref. c, ch. 4]
h. Downgrading [ref. c, ch. 4]
i. Special handling instructions [ref. e, ch. 8]
j. Action addressee(s) [ref. c, ch. 4]
k. Information addressee(s) [ref. c, ch. 4]
l. Exempted addressee(s) [ref. c, ch. 4]
m. Classification [ref. c, ch. 4]
n. Subject line [ref. c, ch. 4]
o. Reference line [ref. c, ch. 4]
p. Precedence [ref. c, ch. 4]
q. DTG [ref. c, ch. 4]

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(Signature and Date)

.4 Describe the following fields used in message format: [ref. b, app. A]

a. EXER
b. OPER
c. MSGID
d. SUBJ
e. REF
f. AMPN
g. NARR
h. POC
i. ACK
j. RMKS

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

107 MESSAGE TEXT FORMAT/HANDLING FUNDAMENTALS (CONT'D)

107.5 Describe the format lines and content used for message transmission using the following formats: [refs. d, h]

a. ACP 126
b. Modified ACP 126
c. JANAP 128
d. Short form readdressal
e. Long form readdressal

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(Signature and Date)

.6 Explain message handling as determined by the following:

a. Precedence [ref. c, ch. 4]
b. Message backlog [ref. c, ch. 1]

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(Signature and Date)

.7 Describe handling and reporting procedures for OPREPs: [ref. e, ch. 8]

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(Signature and Date)

.8 Describe the purpose of the following and identify where each is used: [ref. f]

a. ZEL
b. ZEN addresses
c. NOTAL
d. PASEP
e. ZDS
f. ZWL
g. ZNZ1
h. ZPW
i. ZDK
j. NBAT
k. NGCN

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

107 MESSAGE TEXT FORMAT/HANDLING FUNDAMENTALS (CONT'D)

107.9 Discuss manual intervention and its effect on proper message traffic flow. [ref. c, ch. 2]

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(Signature and Date)

.10 Discuss EAM procedures. [ref. e, ch. 8]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

108 MINIMIZE FUNDAMENTALS

References:

[a] NWP 6-01 (Rev. A), Basic Operational Communications Doctrine
[b] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications, Ch. 4

108.1 Explain the purpose of Minimize. [ref. a, ch. 13]

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(Signature and Date)

.2 State the conditions under which Minimize may be imposed. [ref. a, ch. 26]

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(Signature and Date)

.3 Discuss the authority to impose, modify, or cancel Minimize. [ref. a, ch. 13]

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(Signature and Date)

.4 State the message releasing restrictions under Minimize. [ref. a, ch. 13]

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(Signature and Date)

.5 Discuss alternate methods of delivering message traffic during Minimize conditions. [ref. a, ch. 13]

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(Signature and Date)

.6 Discuss the procedures to be followed upon receipt of a message imposing Minimize conditions. [ref. a, ch. 13]

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(Signature and Date)

.7 Explain the term Minimize Considered. [ref. a, ch. 13]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

108 MINIMIZE FUNDAMENTALS (CONT'D)

108.8 Explain the purpose of the releasing officer's name and rank in the text of the message. [ref. b]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

109 BROADCAST FUNDAMENTALS

References:

[a] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications

109.1 Discuss the functions/purpose of the following:

a. Broadcast area [ch. 3]
b. Area NCTAMS [ch. 3]
c. Broadcast Keying Station [ch. 3]
d. Broadcast Radiating Station [ch. 3]
e. Broadcast Controlling Authority [ch. 3]
f. Broadcast Controlling Station [ch. 3]
g. Channel subscribers [ch. 3]
h. Command guard list [ch. 3]
i. Broadcast shifts [ch. 3]
j. Communications guard shift [ch. 3]
k. Emergency broadcast shift [ch. 3]
l. COMSPOT [Annex C]
m. Broadcast screen request [ch. 3]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

110 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 FUNDAMENTALS

References:

[a] NCTS 50C1012 OM-V2R11, Naval Modular Automated Communications System (NAVMACS) V-2 Operator's Manual

110.1 Define the following terms and abbreviations:

a. ACK
b. Active subscriber
c. ALTROUTE
d. ARQ
e. ARQ LIMIT
f. BCST
g. Bootstrap
h. Bust sequence
i. CAN
j. CANTCO
k. CANTRAC L
l. CG
m. CHR
n. CID
o. CLR
p. Control message
q. CPU
r. CRC
s. Crypto
t. CSN
u. CTTY
v. CUDIXS
w. Default
x. DTS
y. EOL
z. EOM
aa. EOT
ab. FDUX
ac. FIFO
ad. First-run message
ae. Garble
af. Garble threshold
ag. GCSN
ah. GMT
ai. HDG
aj. HDUX
ak. HF
al. Inactive subscriber
am. I/O
an. IXS
ao. JANAP
ap. LI
aq. Link
ar. LK
as. LO
at. Logical unit
au. LRL
av. LSPTP
aw. LSPTR
ax. LU
ay. Missent message
az. MDP
ba. NAK
bb. Narrative message
bc. NCTAMS
bd. NAVMACS
be. NAVTELSYSIC
bf. NCS
bg. NDRO
bh. NGL
bi. NIB
bj. NOB
bk. Nonaddressed message
bl. NTDS

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

110 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 FUNDAMENTALS (CONT'D)

110.1

bm. OCID
bn. OCSN
bo. OON
bp. OPCORR
bq. OTO
br. Output device
bs. Parameter
bt. Parity
bu. Pilot
bv. Primary subscriber
bw. Prosign
bx. Purge
by. QRK
bz. QUE report
ca. Queue
cb. Recap summary MSG
cc. Rerun message
cd. Retrieve
ce. RO
cf. SAMPD
cg. SID
ch. SMN
ci. SOH
cj. SOL
ck. SOP
cl. Special subscriber
cm. SSN
cn. STX
co. Subscriber
cp. TOP
cq. TOT
cr. Transmit queue
cs. TTY
ct. TU
cu. URD
cv. VNR
cw. WML
cx. WPM

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(Signature and Date)

.2 Discuss the following operator commands:

a. ADD CGL
b. ADD WML
c. CAN
d. CAN TRA
e. CAN TRA OTO
f. CDN
g. CGL
h. CHR
i. CLR
j. CLR CGL
k. CLR LRL
l. CLR WML
m. Cup
n. Day
o. DLT CGL
p. DLT WML
q. EDN
r. EMC
s. EUP
t. HLD
u. LOD
v. LOD MSG
w. LRL
x. QUE
y. RPL ARQ
z. RPL CID

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

110 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 FUNDAMENTALS (CONT'D)

110.2

aa. RPL CSN
ab. RPL HDG
ac. RPL LRL
ad. RPL NOB
ae. RPL OON
af. RPL QRK
ag. RPL RRM
ah. RPL SID
ai. RPL TIM
aj. RPL YZO
ak. RTV
al. SDN
am. SPP
an. SUP
ao. SYS
ap. TIM
aq. TRA
ar. TRA OTO
as. TRA OVR
at. WML

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(Signature and Date)

.3 Define the following general system alerts:

a. BACKLOG (DEVICE ID)
b. BACKLOG (DEVICE ID) ALTROUTE LEVEL EXCEEDED
c. CANTCO CIRCUIT ACTIVE
d. CANTCO CIRCUIT DOWN
e. CANTCO DEVICE ACTIVE
f. CANTCO DEVICE DOWN
g. CANTCO LIST FULL
h. CANTCO NO SID
i. CANTCO RPT IN PROGRESS
j. CANTCO RTVL IN PROGRESS
k. CGL CONFLICT
l. CIRCUIT ID EXP (CID/CSN) RCV (CID/CSN)
m. CIRCUIT ID OFF LINE ENCRYPTED (SMN)
n. CIRCUIT ID WML MATCH CANTRAN (CID/CSN)
o. CIRCUIT ID WML MATCH (CID/CSN)
p. DEVICE ID/CIRCUIT ID TIMEOUT
q. DEVICE ID IMPROPER CONDITION
r. DEVICE ID LOAD ABORTED
s. DEVICE ID LOAD COMPLETED
t. DEVICE ID LOAD COMPLETE (SMN)
u. ERROR
v. hhmmZ
w. IOC FAULT (ADDRESS)
x. ITEM NOT FOUND
y. IXS CRYPTO ALARM
z. IXS NCS INITIALIZE

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

110 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 FUNDAMENTALS (CONT'D)

110.3

aa. IXS NCS MSG ACK (SMN)
ab. IXS NCS MSG NAK (SMN)
ac. IXS NCS NO RCV
ad. IXS NCS OTO ACK (OTO #) hhmmZ
ae. IXS NCS OTO ACK (OTO #) RCV (OTO #)
af. IXS NCS OTO NAK (OTO #)
ag. IXS NCS PARITY LIMIT
ah. IXS NCS RCV ABORT
ai. IXS NCS XMIT ABORT
aj. IXS NO VALID INPUT
ak. IXS SUB NO RCV 2 CYCLES
al. IXS SUB PARITY LIMIT
am. MON CLOCK DISABLED
an. NAVMACS FORCED EOM (SMN)
ao. NO PRINTERS ON LINE
ap. OTO NR (OON) hhmmZ
aq. OTO NR (OON) ??hhmmZ
ar. PGM FAULT (ADDRESS)
as. POSSIBLE MISSENT
at. POWER FAILURE hhmmZ
au. (SMN) ALTROUTED TO (DEVICE ID)
av. SMN (SMN)
aw. SMN (SMN) COMPLETE
ax. SMN (SMN) ERROR
ay. (SMN) TRA CAN ON LO1 -- MSG ERROR hhmmZ
az. (SMN) TRA CANTRAN ON LO1 hhmmZ
ba. (SMN) Y/Z ACK NOT RCVD ON LO1
bb. (SMN) Y/Z NO TRA ON LO1 AFTER 30 SEC
bc. (SMN) Y/Z RCVD ON (DEVICE ID)
bd. SYSTEM OVERLOAD
be. SYSTEM OVERLOAD hhmmZ
bf. TRA ON LO1--OPERATOR OVERRIDE OF MSG ERRORS
bg. TR TIMEOUT
bh. ??hhmmZ
bi. !!ABORTED!!

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

110 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 FUNDAMENTALS (CONT'D)

110.4 Identify the following device/circuit mnemonic codes:

a. DS
b. DS1
c. DS2
d. LI1
e. LK
f. LO1
g. MT1
h. MT2
i. MI2
j. MI3
k. MTA
l. MTB
m. NI1
n. NI
o. NI4
p. PR
q. PR1
r. PR2
s. TP1
t. TP2
u. TR1
v. TR2

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(Signature and Date)

.5 Discuss the purpose of the following, describing the composition of each and explaining how it is used by the system:

a. Program tape(s)
b. Spare tape(s)
c. BCST circuit(s)
d. IXS circuit
e. Comm Center terminals
f. Periodic reports
g. Screening error tolerance (QRK)
h. Address screening
i. Negative Guard list
j. Address bounding
k. Maintaining the Command Guard list
l. Reloading paper tape copy

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

110 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 FUNDAMENTALS (CONT'D)

110.5
m. Maintaining the LRL
n. Maintaining the WML
o. Standard message print format
p. Standard message information block
q. Modified message information block
r. Undefined raw data information block
s. Message retrieval
t. Heading analysis
u. Distribution
v. Message accountability/record keeping
w. Closing out the radio day
x. Input processing
y. Output processing

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(Signature and Date)

.6 Discuss the purpose and describe the composition of the following on the LRL/WML outgoing circuits and system reports:

a. Enter on the LRL
b. Clear on the LRL
c. Print on the LRL
d. ADD CID/CSN(s) on the WML
e. Delete CID/CSN(s) on the WML
f. Print on the WML
g. Clear on the WML
h. Link transmission on an outgoing circuit
i. Chronological on system reports
j. Queue

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

111 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) FUNDAMENTALS

References:

[a] EE685-DJ-SUM-020/NAVMACSII (HP), Naval Modular Automated Communications System II, (NAVMACS II), AN/SYQ-7A(V) & 7B(V) System User Manual, Volume 2, Appendices A-N

[b] EE685-DJ-SUM-010/NAVMACSII (HP), Naval Modular Automated Communications System II, (NAVMACS II), AN/SYQ-7A(V) & 7B(V) System User Manual, Volume 1, Operational Procedures and Instructions

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111.1 Define the following terms and abbreviations: [ref. a]

a. ACK
b. ACP
c. Active subscriber
d. ALTROUTE
e. ARQ
f. ARQ LIMIT
g. AUTODIN
h. Backrouting
i. Baud
j. BDCST
k. Bust
l. CAN
m. CANTRAN
n. CGL
o. Character
p. CID
q. CONT
r. CPU
s. Crypto
t. CSN
u. CRATT
v. CUDIXS
w. EOM
x. ETX
y. FIFO
z. First-run message
aa. Garble
ab. GMT
ac. Inactive subscriber
ad. I/O
ae. JANAP
af. Missent message
ag. NAK
ah. Narrative message
ai. NCTAMS
aj. NAVCOMPARS
ak. NAVMACS
al. NCS
am. NGL
an. Non-addressed message
ao. OCSN
ap. OPCOR
aq. OPASSIST
ar. OTO
as. Output device
at. Parameter
au. Parity
av. Prosign
aw. Purge
ax. QRK
ay. QUE report
az. Queue

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

111 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) FUNDAMENTALS (CONT'D)

111.1

ba. Recap summary MSG
bb. Rerun message
bc. Retrieve
bd. SID
be. SMN
bf. SOP
bg. SSN
bh. Subscriber
bi. TOP
bj. TOT
bk. Transmit queue
bl. TTY
bm. TU
bn. URD
bo. VNR
bp. WML

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(Signature and Date)

.2 Discuss the following operator commands: [ref. b]

a. ADD CGL
b. ADD WML
c. CAN
d. CAN TRA
e. CAN TRA OTO
f. CGL
g. CLR CGL
h. CLR LRL
i. CLR WML
j. Day
k. DLT CGL
l. DLT WML
m. HLD
n. LOAD
o. LOAD MSG
p. QUE
q. RPL ARQ
r. RPL CID
s. RPL CSN
t. RPL NOB
u. RPL QRK
v. RPL SID
w. WML

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

111 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) FUNDAMENTALS (CONT'D)

111.3 Define the following general system alerts: [ref. a]

a. ABORTED
b. CIRCUIT ACTIVE
c. CIRCUIT DOWN
d. DEVICE ACTIVE
e. DEVICE DOWN
f. LIST FULL
g. NO SID
h. RPT IN PROGRESS
i. CGL CONFLICT
j. CIRCUIT ID EXP (CID/CSN) RCV (CID/CSN)
k. CIRCUIT ID WML MATCH CANTRAN (CID/CSN)
l. CIRCUIT ID WML MATCH (CID/CSN)
m. CKT COULD NOT DELIVER SMN
n. DELIVERED SENSATIVE MESAGE
o. DELIVERED TOP SECRET MESSAGE
p. DEVICE ID/CIRCUIT ID TIMEOUT
q. DEVICE ID IMPROPER CONDITION
r. DEVICE ID LOAD ABORTED
s. DEVICE ID LOAD COMPLETED
t. DEVICE ID LOAD COMPLETE (SMN)
u. ERROR
v. ddhhmmZ
w. IOC FAULT (ADDRESS)
x. CRYPTO ALARM
y. NCS EXCEEDING ARQ LIMIT
z. NCS INITIALIZE
aa. NCS MSG ACK (SMN)
ab. NCS MSG NAK (SMN)
ac. NCS NO RCV
ad. NCS NOT ACCEPTING MESSAGE
ae. NCS OTO ACK (OTO #) hhmmZ
af. NCS OTO ACK (OTO #) RCV (OTO #)
ag. NCS OTO NAK (OTO #)
ah. NCS RCV ABORT
ai. NCS XMIT ABORT
aj. NO VALID INPUT
ak. NAVMACS FORCED EOM (SMN)
al. OTO NR (OON) hhmmZ

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

111 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) FUNDAMENTALS (CONT'D)

111.3 am. POWER FAILURE hhmmZ
an. (SMN) ALTROUTED TO (DEVICE ID)
ao. SMN (SMN)
ap. SMN (SMN) COMPLETE
aq. SMN (SMN) ERROR
ar. SYS BACKLOG
as. SYSTEM OVERLOAD
at. SYSTEM OVERLOAD hhmmZ

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(Signature and Date)

.4 Discuss the purpose of the following: [ref. a]

a. Program tape(s)
b. Spare tape(s)
c. BCST circuit(s)
d. Different circuit types
e. Comm Center terminals
f. Periodic reports
g. Screening error tolerance (QRK)
h. Address screening
i. Negative Guard list
j. Maintaining the Command Guard list
k. Maintaining the WML
l. Standard message print format
m. Message retrieval
n. Distribution
o. Message accountability/record keeping
p. Closing out the radio day
q. Input processing
r. Output processing

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

111 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) FUNDAMENTALS (CONT'D)

111.5 Discuss the purpose of the following on the WML outgoing circuits and system reports: [ref. a]

a. ADD CID/CSN(s) on the WML
b. Delete CID/CSN(s) on the WML
c. Print on the WML
d. Clear on the WML
e. Queue

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

112 ANTENNA AND RADIO WAVE PROPAGATION FUNDAMENTALS

References:

[a] NAVEDTRA 14225, Information Systems Technician Training Series, Module 4-Communications Hardware
[b] NAVEDTRA 14182, Navy Electricity and Electronics Training Series, Module 10-Introduction to Wave Propagation, Transmission Lines, and Antennas
[c] NTP 6 (D), Naval Telecommunications Procedures, Spectrum Management Manual
[d] Own Ship's Antenna Radiation Patterns
[e] Own Ship's Antenna Systems

112.1 Describe the locations and functional use of local shipboard communication antennas. [refs. d, e]

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(Signature and Date)

.2 Discuss the following in detail as applied to radio signals: [ref. c, ch. 1]

a. Hz
b. Frequency
c. kHz
d. MHz
e. GHz

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

112 ANTENNA AND RADIO WAVE PROPAGATION FUNDAMENTALS (CONT'D)

112.3 Discuss the following antenna-related terms in detail: [ref. a, ch. 2; refs. d, e]

a. Antenna
b. Radiation pattern
c. Directivity and directional antennas
d. Wave length
e. Standing wave
f. VSWR
g. Polarization and field strength
h. Half-wave/quarterwave
i. Electrical length
j. Beamwidth
k. Megameter (meggar)

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(Signature and Date)

.4 Define the following abbreviations and state the frequency range of each: [ref. a, ch. 1; ref. c, ch. 1]

a. ELF
b. VLF
c. LF
d. MF
e. HF
f. VHF
g. UHF
h. SHF
i. EHF

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(Signature and Date)

.5 Describe ionospheric layers and their effects on propagation. [ref. b, ch. 2; ref. c, Annex I]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

112 ANTENNA AND RADIO WAVE PROPAGATION FUNDAMENTALS (CONT'D)

112.6 State the propagation characteristics of the following radio waves: [ref. b, ch. 2]

a. Direct
b. Ground
c. Space
d. Sky

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(Signature and Date)

.7 Discuss the following terms, describing what it is and the effect of each on propagation:

a. Attenuation [ref. b, ch. 2]
b. Conductivity [ref. b, ch. 2]
c. Critical frequency [ref. b, ch. 2]
d. Diffraction [ref. b, ch. 2]
e. Fading [ref. b, ch. 2]
f. Frequency [ref. b, ch. 2]
g. Noise [ref. b, ch. 3]
h. Ionization [ref. b, ch. 2]
i. Power [ref. b, ch. 2]
j. Reflection [ref. b, ch. 2]
k. Refraction [ref. b, ch. 2]
l. Sunspots [ref. b, ch. 2]
m. Skip distance [ref. b, ch. 2]
n. Skip zone [ref. b, ch. 2]
o. Selective fading [ref. b, ch. 2]
p. Multipath fading [ref. b, ch. 2]
q. Scintillation [ref. c, Annex A]

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(Signature and Date)

.8 Explain the meaning of each element in an emission designator. [ref. c, Annex G]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

112 ANTENNA AND RADIO WAVE PROPAGATION FUNDAMENTALS (CONT'D)

112.9 Describe the following frequency usage terms: [ref. c]

a. Assigned frequency [Annex A]
b. Reference frequency (operating window) [Annex G]
c. Suppressed carrier frequency [Annex A]
d. MUF [Annex A]
e. FOT [Annex A]
f. LUF [Annex A]

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(Signature and Date)

.10 Describe the sources for the following types of EMI: [ref. b, ch. 2]

a. Natural
b. Man-made
c. Harmonics

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(Signature and Date)

.11 Describe the techniques used based on radio wave propagation: [ref. a, ch. 2]

a. LPI
b. LRI

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

113 VOICE OPERATIONS FUNDAMENTALS

References:

[a] ACP 113(AF), Call Sign Book for Ships, Ch. 2
[b] NAVEDTRA 14226, Information Systems Technician Training Series, Module 5-Communications Center Operations, Ch. 2
[c] ACP 125(F), Communication Instructions Radiotelephone Procedures

113.1 Describe the following call signs:

a. International [refs. a, b]
b. Military [ref. b]
c. Voice [ref. b]
d. Tactical [ref. b]
e. Collective [ref. b]
f. Conjunctive [ref. b]
g. Daily/changing call signs [ref. b]

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(Signature and Date)

.2 State the purpose of call signs. [ref. c, ch. 1]

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(Signature and Date)

.3 Discuss call sign compromise and security precautions. [ref. c, ch. 2]

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(Signature and Date)

.4 Discuss gingerbread and its purpose. [ref. b]

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(Signature and Date)

.5 Discuss and define EEFI. [ref. c, ch. 8]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

113 VOICE OPERATIONS FUNDAMENTALS (CONT'D)

113.6 Discuss BEADWINDOW procedures. [ref. c, ch. 8]

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(Signature and Date

.7 Discuss challenge and reply authentication. [ref. c, ch. 6]

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(Signature and Date

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

114 BASIC CIRCUITS FUNDAMENTALS

References:

[a] NAVEDTRA 14226, Information Systems Technician Training Series, Module 5-Communications Center Operations
[b] ACP 126 (C), Communications Instructions Teletypewriter (Teleprinter) Procedures
[c] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications
[d] SPAWARINST 2700.1, Shipboard Quality Monitoring Control System
[e] ACP 131(F), Communications Instructions Operating Signals
[f] NWP 6-01 (Rev. A), Basic Operational Communications Doctrine
[g] Combat System Operational Sequencing System (CSOSS)
[h] FSCS-211-79-13-2B, UHF DAMA Operator OJT Handbook, Shipboard
[i] NTP 2, Section 5, Navy Satellite Communications (SATCOM) Broadcast Service
[j] NAVEDTRA 14223, Information Systems Technician Training Series, Module 2-Computer Systems
[k] NAVEDTRA 14225, Information Systems Technician Training Series, Module 4-Communications Hardware

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114.1 Define and discuss the following:

a. NECOS [ref. a, ch. 1; ref. c, ch. 6]
b. FSK [ref. i, Annex B]
c. Tone MOD RATT [ref. c, ch. 6]
d. Simplex [ref. j, ch.6; ref. c, ch. 6]
e. HDUX [ref. j, ch. 6]
f. FDUX [ref. j, ch. 6]
g. AFTS [ref. d, ch. 4]
h. PSK [ref. i, Annex B]

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(Signature and Date)

.2 Define and discuss the following:

a. Prosigns [ref. a, ch. 2; ref. b, ch. 2]
b. Operating signals [ref. c, ch. 4; ref. e, ch. 3]
c. Circuit discipline [ref. b, ch. 1; ref. c, ch. 6]
d. Watch turnover [ref. c, chs. 1, 6]
e. Traffic channels [ref. c, ch. 6]
f. Termination shift [ref. c, ch. 6; ref. k, ch. 4]
g. Termination NCTAMS/NAVCOMMTELSTA [ref. c, ch. 6; ref. k, ch. 4]

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

114 BASIC CIRCUITS FUNDAMENTALS (CONT'D)

114.2 h. Send/receive off the air monitor [ref. c, ch. 4]
i. Termination frequency [ref. k, ch. 4]
j. Circuits status board [ref. c, ch. 6; ref. k, ch. 4]

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(Signature and Date)

.3 Describe multiplex as applied to naval communications. [ref. h, ch. 4; ref. k, chs. 1, 2]

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(Signature and Date)

.4 Discuss the following terms as applied to multiplex signals:

a. Time division [ref. k, ch. 1]
b. Frequency division [ref. k, ch. 1]
c. Space diversity [ref. k, ch. 1]
d. Radio frequency diversity [ref. k, ch. 1]
e. Tone diversity [ref. k, ch. 1]
f. Tone space diversity [ref. k, ch. 1]
g. Tone radio frequency diversity [ref. k, ch. 1]
h. DAMA [ref. h, ch. 4; ref. k, chs. 1, 2]

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(Signature and Date)

.5 Discuss the following in detail:

a. Link circuits [ref. g]
b. HF fleet broadcast [ref. c, chs. 2, 3]
c. Satellite fleet broadcast [ref. c, chs. 2, 3]
d. VLF submarine broadcast [ref. f, ch. 16]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

115 COMMON CIRCUITS FUNDAMENTALS

References:

[a] Local Standard Operating Procedures (SOP)
[b] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications
[c] NWP 6-01 (Rev. A), Basic Operational Communications Doctrine
[d] Local Battle Force Electronic Mail System Operating Manual

115.1 Describe the functions/purposes of the following, as well as any common circuits pertaining to your command not listed:

a. CEWN [ref. a]
b. HF GLOBAL [ref. c, ch. 21]
c. SATHICOM [ref. c, ch. 21]
d. NAVY RED [ref. a]
e. Harbor common [ref. c, ch. 27]
f. Degaussing net [ref. a]
g. CSS [ref. b, ch. 7]
h. Submarine circuits [ref. c, ch. 22]
i. Task group teletype [ref. a]
j. SAR [ref. c, ch. 10]
k. NTDS circuits [ref. a]
l. S/S [ref. c, ch. 21]
m. CHAT [ref. a]
n. BFEM-66 [ref. d]
o. Link [ref. b, ch. 7]

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(Signature and Date)

.2 Explain the following for the voice nets/circuits listed: [ref. b, ch. 6]

a. DIRECTED NET
b. FREE NET
c. Requirements for guarding

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

116 DISTRESS CIRCUITS FUNDAMENTALS

References:

[a] NWP 6-01 (Rev. A), Basic Operational Communications Doctrine
[b] ACP 135 (E), Communications Instructions Distress and Rescue Procedures, Ch. 2
[c] NAVEDTRA 14225, Information Systems Technician Training Series, Module 4-Communications Hardware, Ch. 1
[d] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications, Ch. 6

116.1 Discuss the following circuits, giving frequency, schedules, and any unique operating procedures: [ref. a, chs. 10, 11; refs. b, c]

a. International calling and distress
b. International lifeboat, life raft, and survival craft
c. International aeronautical distress VHF
d. Military aeronautical distress UHF

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(Signature and Date)

.2 Discuss distress equipment and circuit guard requirements. [refs. b, c]

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(Signature and Date)

.3 Discuss the communication procedures to be followed when hearing a distress signal. [ref. a, ch. 11]

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(Signature and Date)

.4 Discuss on-scene communications procedures during distress. [ref. a, ch. 11]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

116 DISTRESS CIRCUITS FUNDAMENTALS (CONT'D)

116.5 Discuss terminating distress communications. [ref. a, ch. 11]

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(Signature and Date)

.6 Discuss SUBLOOK/SUBMISS/SUBSUNK procedures. [ref. d]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

117 PORTABLE COMMUNICATIONS EQUIPMENT FUNDAMENTALS

References:

[a] Portable Communications Manufacturer's Technical Manual

117.1 State the purpose of portable communications equipment.

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(Signature and Date)

.2 Describe the portable communications equipment utilized by your command.

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(Signature and Date)

.3 State the condition under which portable equipment will be used.

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

118 ULTRA HIGH FREQUENCY (UHF) SATELLITE COMMUNICATIONS (SATCOM) FUNDAMENTALS

References:

[a] FSCS-211-79-13-2B, UHF DAMA Operator OJT Handbook, Shipboard
[b] EE130-D8-IEM-010/010/USC-61(C), Interactive Electronic Technical Manual for the Digital Modular Radio (DMR) AN/USC-61(C) Organizational Level Operation and Maintenance Instructions
[c] Ships RCS / MD-1324
[d] Tomahawk Strike Network (TSN) User's Guide

118.1 Discuss the following:

a. DAMA [ref. a, ch. 2]
b. Basic frame structures [ref. a, ch. 2]
c. TDMA-1 frame structures [ref. a, ch. 2]
d. TDMA-2 and TDMA-3 frame structures [ref. a, ch. 2]
e. DMR [ref. b, ch. 1]
f. MD-1324 [ref. c, ch. 1]
g. Time slots [ref. a, ch. 2]
h. CCOW [ref. a, ch. 2]
i. Range [ref. a, ch. 2]
j. Link test [ref. a, ch. 2]
k. RCCOW [ref. a, ch. 2]
l. Data segments [ref. a, ch. 2]
m. Acquisition [ref. a, ch. 2]
n. DAMA system features [ref. a, ch. 2]
o. Channel control [ref. a, ch. 2]
p. Independent channel access [ref. a, ch. 2]
q Circuit identification number [ref. a, ch. 2]
r. RRI capability [ref. a, ch. 2]
s. TDMA mode [ref. a, ch. 2]
t. I/O parts [ref. a, ch. 2]
u. Frequency and keyline control [ref. a, ch. 2]
v. Interfaces [ref. a, ch. 2]
w. Electronic key generator TSEC/KGV-11 [ref. a, ch. 2]
x. Baseband subsystems [ref. a, ch. 2]
y. TSEC/KG-84 current loop operation [ref. a, ch. 2]
z. Shipboard installation equipment [ref. a, ch. 2]
aa. Power distribution panel [ref. a, ch. 2]
ab. Panel monitor [ref. a, ch. 2]

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

118 ULTRA HIGH FREQUENCY (UHF) SATELLITE COMMUNICATIONS (SATCOM) FUNDAMENTALS (CONT'D)

118.1
ac. Data and control patching switchboard [ref. a, ch. 2]
ad. Intermediate frequency patching panels [ref. a, ch. 2]
ae. Large ship configuration [ref. a, ch. 3]
af. Small ship configuration [ref. a, ch. 3]
ag. System timing generator [ref. a, ch. 3]
ah. DCMA [ref. a, ch. 3]
ai. Operator controls and indicators [ref. a, ch. 3]
aj. Keypad commands [ref. a, ch. 3]
ak. DAMA shorthand keypad guide [ref. a, ch. 3]
al. Practical application of circuit numbers [ref. a, ch. 3]
am. Practical application of ID numbers [ref. a, ch. 3]
an. General preventive maintenance [ref. a, ch. 6]
ao. Battery replacement [ref. a, ch. 6]
ap. Single radio operations [ref. a, Annex A]
aq. Dual radio operations [ref. a, Annex A]
ar. Bit alarms [ref. a, Annex A]
as. Setup of TSN [ref. d]
at. TSN Parameters worksheet [ref. d]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

119 EXTREMELY HIGH FREQUENCY (EHF) (AN/USC-38) FUNDAMENTALS

References:

[a] EE130-AG-HBK-020/Volume 1, USC-38(V) Extremely High Frequency (EHF) Low Data Rate (LDR) and Medium Data Rate (MDR) System User's Handbook
[b] NTP 2, Section 3 (B), Navy Extremely High Frequency Satellite Communications

119.1 Discuss the function of the following equipment as used in the AN/USC-38: [ref. a, ch. 3; ref. b, ch. 2]

a. PDU
b. TCU
c. Modem/TCP
d. CV-4056(V)/USC-38(V)
e. FOT terminal
f. TIP
g. NECC

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(Signature and Date)

.2 Discuss EHF satellites description and operational capabilities. [ref. a, ch. 2; ref. b, ch. 2]

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(Signature and Date)

.3 Describe the location and functional use of the various baseband equipment used in conjunction with EHF. [ref. a, ch. 2; ref. b, chs. 2 thru 4]

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(Signature and Date)

.4 Discuss the EHF terminal start-up procedures. [ref. a, app. A; ref. b, chs. 1, 2]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

119 EXTREMELY HIGH FREQUENCY (EHF) (AN/USC-38) FUNDAMENTALS (CONT'D)

119.5 Explain the following EHF satellite/beam acquisition terms:

a. Privilege level [ref. a, apps. B, D; ref. b, ch. 2]
b. EC/DA acquisition [ref. a, apps. B, D; ref. b, ch. 3]
c. EC acquisition time [ref. a, apps. B, D; ref. b, ch. 3]
d. HHR Agile C2 cycles [ref. a, apps. B, D]
e. LHR Agile C2 cycles [ref. a, apps. B, D]
f. agile to spot beam change [ref. a, apps. B, D; ref. b, ch. 3]
g. transitioning beams [ref. a, apps. B, D]
h. ephemeris update [ref. a, apps. B, D; ref. b, ch. 3]

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(Signature and Date)

.6 Discuss the following activation/deactivation net notes terms:

a. Net activation [ref. b, ch. 5]
b. Net keep alive [ref. a, app. D]
c. Net set-up [ref. b, ch. 5]
d. HOP boundary change [ref. b, ch. 3]
e. Net deactivation check [ref. b, ch. 5]
f. Activate net failed, timeslot not available [ref. a, app. D]
g. FEP secondary services [ref. b, chs. 3 thru 5]

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(Signature and Date)

.7 Describe activation/deactivation net procedures. [ref. a, app. D; ref. b, ch. 5]

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(Signature and Date)

.8 Discuss a joint net activation. [ref. a, app. D]

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(Signature and Date)

.9 Activate EHF TIP [ref. b]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

120 SUPER HIGH FREQUENCY (SHF) SATELLITE COMMUNICATIONS (SATCOM) FUNDAMENTALS

References:

[a] NTP 2, Section 4 (A), Navy Commercial Satellite Communications
[b] NTP 2, Section 1 (E), Navy Super High Frequency Satellite Communications
[c] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications
[d] ACP 220, Multinational Videoconferencing Services
[e] ADNS Specific Technical Manuals
[f] Modem Specific Technical Manuals
[g] AN/FCC-100(V) 9 Technical Manual

120.1 Discuss the following SHF data circuits:

a. CTAPS [ref. b, ch. 4]
b. JWICS [ref. b, ch. 4]
c. MARCEMP [ref. c, ch. 2]
d. SHF orderwire [ref. b, chs. 1 thru 3]
e. GCCS [ref. b, chs. 1, 4]
f. FSB [ref. b, ch. 2]
g. VTC [ref. d, ch.1]
h. SHF GATEGUARD [ref. c]
i. ADNS [ref. e]
j. FSM [ref. c, ch. 2]

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(Signature and Date)

.2 Describe the following voice circuit equipment:

a. SEC/KY-68 [ref. b, ch. 4]
b. APTS/POTS [ref. a, ch. 6]
c. TSEC/KYV-5 ANDVT [ref. b, ch. 4]
d. STE/STU-III [ref. b, ch. 4]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

120 SUPER HIGH FREQUENCY (SHF) SATELLITE COMMUNICATIONS (SATCOM) FUNDAMENTALS (CONT'D)

120.3 Discuss the following SHF multiplexers:

a. AN/FCC-100 (V) 3/5/6/7/8 [ref. b, chs. 2, 4]
b. AN/FCC-100 (V) 4X [ref. b, chs. 2, 4]
c. AN/FCC-100 (V) 9 [ref. g]

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(Signature and Date)

.4 Discuss the following modulation types and satellite access techniques: [ref. b]

a. BPSK [ch. 2]
b. QPSK [ch. 2]
c. Offset QPSK [ch.2]
d. Symbol rate/bandwidth [ch. 2]
e. Error detection and error correction [chs. 2, 3]
f. Multiple access of a satellite [chs. 1 thru 3]
g. FDMA [chs. 1 thru 3]
h. TDMA [chs. 1 thru 3]

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(Signature and Date)

.5 Discuss general modem operations: [ref. f]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

121 EMISSIONS CONTROL (EMCON) FUNDAMENTALS

References:

[a] Local EMCON Bill/Instruction
[b] NWP 6-01 (Rev. A), Basic Operational Communications Doctrine
[c] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications
[d] NAVEDTRA 14222, Information Systems Technician Training Series, Module 1-Administration and Security
[e] Local Standard Operating Procedures (SOP)

121.1 Define the following terms and discuss their relationship with each other:

a. EMCON [ref. a; ref. b, ch. 15]
b. RADHAZ [ref. b, ch. 15]
c. HERO [ref. b, ch. 15]
d. RIVER CITY [ref. e]

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(Signature and Date)

.2 Discuss the following:

a. Types of EMCON [ref. a; ref. b, ch. 15]
b. Authority to impose EMCON [ref. a; ref. b, ch. 15]
c. Authority to lift EMCON [ref. a; ref. b, ch. 15]
d. Methods of communicating during EMCON [ref. c, ch. 6]
e. Procedures to use when breaking EMCON [ref. a]
f. Internal reporting requirements when EMCON is set [ref. b, ch. 15]

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(Signature and Date)

.3 Discuss the following:

a. Ship's radiation hazard areas [ref. a]
b. Electromagnetic radiation safety procedures [ref. a; ref. c, ch. 6]
c. TEMPEST requirements [ref. d, ch. 5]
d. HERO in-port and underway [ref. c, ch. 6]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

122 OPERATIONS ORDERS (OPORD) FUNDAMENTALS

References:

[a] NAVEDTRA 14222, Information Systems Technician Training Series, Module 1-Administration and Security
[b] NWP 5-01 (Rev. A), Naval Operational Planning

122.1 Identify and define the following: [ref. a, ch. 2]

a. Heading
b. Body
c. Ending
d. Annex
e. Appendix
f. Tab
g. Enclosure

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(Signature and Date)

.2 Explain the purpose of the following:

a. OPORD [ref. b, ch. 7]
b. Communications Annex [ref. a, ch. 2]
c. COMMPLAN [ref. a, ch. 2]
d. OPTASK COMM [ref. b, ch. 7]

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(Signature and Date)

.3 Identify the seven paragraphs in the body of an OPORD. [ref. b, ch. 6]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

123 HARDWARE AND SOFTWARE FUNDAMENTALS

References:

[a] The Complete PC Upgrade and Maintenance Guide, 16th Edition, ISBN: 9780782144314
[b] Networking All-in-One Desk Reference for Dummies, 2nd Edition
[c] CCNA: Cisco Certified Network Associate, Study Guide: 5th Edition, Exam 640-801, ISBN: 9780782143119

123.1 Discuss and define the following terms in detail:

a. ACPI [ref. a, ch. 23]
b. ASCII [ref. a, Glossary]
c. ATX [ref. a, ch.3]
d. Backup files [ref. a, ch. 13]
e. Baud rate [ref. a, Glossary]
f. Bandwidth [ref. a, Glossary]
g. BIOS [ref. a, ch. 13]
h. Bit [ref. a, Glossary]
i. Binary [ref. a, Glossary]
j. BNC [ref. a, ch. 2]
k. Byte [ref. a, Glossary]
l. Buffer [ref. a, ch. 8]
m. Cache [ref. a, ch. 8]
n. CD-ROM [ref. a, Glossary]
o. Copy [ref. a, ch. 13]
p. CPU [ref. a, ch. 2]
q. CMOS [ref. a, ch. 2]
r. Coaxial Cable [ref. a, ch. 26]
s. DCE [ref. c, ch. 11]
t. DDR [ref. a, ch. 6]
u. Defragment [ref. a, ch. 13]
v. DOS [ref. a, ch. 12]
w. Delete [ref. a, ch. 12]
x. Directories [ref. a, Glossary]
y. DIMM [ref. a, Glossary]
z. Driver [ref. a, ch. 23]
aa. DTE [ref. c, ch. 11]
ab. DVD [ref. a, Glossary]
ac. EIDE [ref. a, ch. 1]
ad. Ethernet [ref. a, ch. 26]
ae. FAT [ref. a, ch. 12]
af. Function keys [ref. a, Glossary]
ag. FQDN [ref. c, ch. 2]

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

123 HARDWARE AND SOFTWARE FUNDAMENTALS (CONT'D)

123.1

ah Hexadecimal [ref. a, Glossary]
ai. IDE [ref. a, ch. 10]
aj. IEEE [ref. a, ch. 27]
ak. IP [ref. a, ch. 26]
al. LAN [ref. a, Glossary]
am. MAC [ref. a, Glossary]
an. MMC [ref. b, ch. 2]
ao. Memory [ref. a, Glossary]
ap. Motherboard [ref. a, ch. 2]
aq. NIC [ref. a, ch. 3]
ar. NTFS [ref. a, ch. 12]
as. Operating System [ref. a, Glossary]
at. Page File [ref. a, ch. 6]
au. Parallel Port [ref. a, Glossary]
av. PATA [ref. a, ch. 10]
aw. PCI [ref. a, ch. 1]
ax. Peripheral equipment [ref. a, ch. 1]
ay. POST [ref. a, Glossary]
az. Power Supply [ref. a, ch. 7]
ba. Printer [ref. a, ch. 15]
bb. PS/2 [ref. a, Glossary]
bc. RAID [ref. a, ch. 12]
bd. RAM [ref. a, chs. 1, 2]
be. Registry [ref. a, Glossary]
bf. RJ-11 [ref. a, ch. 26]
bg. RJ-45 [ref. a, ch. 26]
bh. ROM [ref. a, ch. 6]
bi. SATA [ref. a, ch. 2]
bj. SCSI [ref. a , ch. 11]
bk. Serial Port [ref. a, ch. 2]
bl. Service Pack [ref. b, ch. 3]
bm. Shell [ref. b, ch. 8]
bn. SIMM [ref. a, ch. 6]
bo. USB [ref. a, ch. 22]
bp. Virus [ref. a, ch. 29]
bq. WAN [ref. a, Glossary]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

124 NETWORKING FUNDAMENTALS

References:

[a] CCNA: Cisco Certified Network Associate, Study Guide: 5th Edition, Exam 640-801, ISBN: 9780782143119
[b] Networking All-in-One Desk Reference for Dummies, 2nd Edition
[c] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications
[d] Local Standard Operating Procedures (SOP)

124.1 Discuss and define the following terms in detail:

a. ARP [ref. a, ch. 2]
b. ACL [ref. a, ch. 10]
c. Backbone [ref. b, ch. 1]
d. BGP [ref. a, Glossary]
e. Cabling [ref. b, ch. 2]
f. Duplex [ref. a, ch. 1]
g. Dynamic Routing [ref. a, ch. 5]
h. Encapsulation [ref. a, ch. 1]
i. Ethernet Interface [ref. a, ch. 1]
j. Fast Ethernet Interface [ref. a, ch. 1]
k. Gateway [ref. a, ch. 5]
l. Hub/Switch [ref. a, ch. 7]
m. ICMP [ref. a, ch. 2]
n. IOS [ref. a, ch. 4]
o. IP Address [ref. a, ch. 2]
p. Loopback Interface [ref. a, ch. 6]
q. MAC [ref. a, ch. 1]
r. NIC [ref. b, ch. 3]
s. NVRAM [ref. a, ch. 4]
t. OSPF [ref. a, ch. 6]
u. Port [ref. a, ch. 2]
v. Protocol [ref. a, Glossary]
w. RIP [ref. a, ch. 5]
x. Router [ref. a, Glossary]
y. Serial Interface [ref. a, ch. 4]
z. Server [ref. a, Glossary]

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

124 NETWORKING FUNDAMENTALS (CONT'D)

124.1 aa. Subnet [ref. a, Glossary]
ab. Subnet Mask [ref. a, Glossary]
ac. Static Routing [ref. a, ch. 5]
ad. TCP/IP [ref. a, ch. 2]
ae. TCP [ref. a, ch. 2]
af. Tunneling [ref. a, ch. 1]
ag. UDP [ref. a, ch. 2]
ah. VoIP [ref. a, ch. 2]

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(Signature and Date)

.2 Discuss and describe the OSI model. [ref. a, ch. 1]

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(Signature and Date)

.3 Discuss the basic topology of a LAN. [ref. b, ch. 1]

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(Signature and Date)

.4 Describe the ports and protocols used by the following network services:

a. DNS [ref. a, ch. 2]
b. FTP [ref. a, ch. 2]
c. HTTP [ref. b, ch. 1]
d. HTTPS [ref. b, ch. 1]
e. NetBIOS [ref. b, ch. 6]
f. POP [ref. a, ch. 11]
g. SMTP [ref. a, ch. 2]
h. TELNET [ref. a, ch. 2]
i. TFTP [ref. a, ch. 2]

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(Signature and Date)

.5 Discuss and describe the use of the following Cisco router commands:

a. show interface description [ref. a, ch. 4]
b. show ip interface brief [ref. a, ch. 4]
c. show ip access-lists [ref. a, ch. 10]
d. show ip ospf neighbor [ref. a, ch. 6]
e. show debug [ref. a, ch. 5]
f. configure terminal [ref. a, ch. 4]

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

124 NETWORKING FUNDAMENTALS (CONT'D)

124.5
g. reload [ref. a, Glossary]
h. copy running-configuration startup-configuration [ref. a, ch. 4]
i. copy tftp running-configuration [ref. a, ch. 9]
j. enable [ref. a, ch. 4]
k. password [ref. a, ch. 4]
l. erase [ref. a, ch. 7]
m. terminal monitor [ref. a, ch. 5]
n. terminal no monitor [ref. a, ch. 5]
o. show logging synchronous [ref. a, ch. 4]
p. no debug all [ref. a, ch. 5]

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(Signature and Date)

.6 Explain troubleshooting procedures when a fleet unit contacts the NOC due to loss of connectivity on a network enclave. (from your command's point of view) [refs. c, d]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

125 DEFENSE MESSAGING SYSTEM (DMS) FUNDAMENTALS

References:

[a] ACP 131(F), Communications Instructions Operating Signals
[b] NTP 3 Supp. 1 Naval Telecommunications Users Manual, Address Indicating Group (AIG), Collective Address Designator (CAD), and Task Organization (TASK) Handbook
[c] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications
[d] NWP 6-01 (Rev. A), Basic Operational Communications Doctrine
[e] NTP 22, Naval Telecommunications Procedures, Defense Message System Local Operations and Network Management Policies and Procedures
[f] NTP 21 Supp-1, Naval Telecommunications Procedures, Defense Message System, X.500 Directory Distinguished Name (DN) and Mail List (ML) Registration Procedures
[g] NTP 21(A), Naval Telecommunications Procedures, Defense Message System User's Manual
[h] JANAP 128(J), Automatic Digital Network (AUTODIN) Operating Procedures
[i] DMDS Home Page (https://www.dmshelp.navy.mil)
[j] Naval Messaging (https://navalmessaging.nmci.navy.mil)
[k] Local Standard Operating Procedures (SOP)
[l] COMSPAWARSYSCOM E-Learning DMDS Student Guide (JUNE 2006)
[m] NAG 69C, Interim Operational Security Doctrine for SBU Fortezza Cards, Dated 241619Z FEB 98

125.1 Discuss and define the following terms in detail:

a. LMTA [ref. f, ch. 2]
b. BMTA [ref. f, ch. 2]
c. DSA [ref. f, ch. 2]
d. LDSA [ref. f, ch. 2]
e. MFI [ref. f, ch. 2]
f. MLA [ref. f, ch. 2]
g. CAW [ref. f, ch. 2]
h. CAW/SA [ref. f, ch. 2]
i. CA [ref. f, ch. 2]
j. ADUA [ref. f, ch. 2]
k. DMS [ref. f, ch. 2]
l. DUA [ref. f, ch. 2]
m. GWS [ref. f, ch. 2]
n. IDUA [ref. f, ch. 2]
o. DMDS [ref. f, ch. 2]
p. FORTEZZA [ref. f, ch. 2]
q. MS [ref. f, ch. 2]
r. UA [ref. f, ch. 2]
s. DIB [ref. f, ch. 3]

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

125 DEFENSE MESSAGING SYSTEM (DMS) FUNDAMENTALS (CONT'D)

125.1
t. DIT [ref. f, ch. 3]
u. DN [ref. f, ch. 3]
v. RDN [ref. f, ch. 3]
w. ML [ref. f, ch. 3]
x. O/R ADDRESS [ref. f, ch. 3]
y. LDSA [ref. f, ch. 3]
z. X.509 [ref. f, ch. 10]
aa. X.400 [ref. f, ch. 2]
ab. AIG [ref. b, chs. 1, 2]
ac. CAD [ref. b, chs. 1, 3]
ad. JANAP [ref. b, ch. 1]
ae. OPSIGS [ref. a]
af. AUTODIN [ref. c, ch. 2, sec. 1]
ag. MCS [ref. b, ch. 1]
ah. NDN [ref. g, ch. 8]
ai. MTS ID [ref. g, ch. 5]
aj. NREMS [ref. c, ch. 2]
ak. AMHS [ref. c, ch. 2]

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(Signature and Date)

.2 Discuss and identify the following message elements: [ref. h, ch. 4]

a. Service/trace message
b. Originator
c. Text
d. Special handling designations
e. Action addressee(s)
f. Information addressee(s)
g. Exempted addressee(s)
h. Classification
i. Subject

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(Signature and Date)

.3 Discuss in detail the following message processing delivery systems:

a. PCMT [ref. c, ch. 2]
b. DMS [refs. f, g]
c. DMDS [ref. f, ch. 2]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

125 DEFENSE MESSAGING SYSTEM (DMS) FUNDAMENTALS (CONT'D)

125.4 State the purpose of the PCMCIA drive. [ref. f, ch. 2]

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(Signature and Date)

.5 Explain the following types of messages: [ref. g, ch. 4]

a. P22
b. P772
c. ACP 120

_____
(Signature and Date)

.6 Discuss the following operations/processes in detail:

a. FORTEZZA logon procedures [ref. f, ch. 2]
b. Signing and encrypting messages [ref. g, ch. 8]
c. FORTEZZA Card lockout /zeroization [ref. m, sec. 3.24]
d. FORTEZZA Card storage [ref. m, sec. 3.24]
e FORTEZZA Cards [ref. m, sec. 3.24]
f. FORTEZZA Roles [ref. m]
g. X.509 certificates [ref. f, ch. 10]

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(Signature and Date)

.7 Explain the difference between plain text and rich text. [ref. g, ch. 8]

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(Signature and Date)

.8 Discuss an Individual message. [ref. g, ch. 7]

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(Signature and Date)

.9 Discuss an Organizational message. [ref. g, ch. 7]

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(Signature and Date)

.10 Explain the process of submitting DCHD trouble tickets. [ref. i]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

125 DEFENSE MESSAGING SYSTEM (DMS) FUNDAMENTALS (CONT'D)

125.11 Discuss the Military Message properties tab. [ref. g, ch. 5]

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(Signature and Date)

.12 Discuss the Personal Address Book. [ref. g]

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(Signature and Date)

.13 Discuss Personal Address Book synchronization. [ref. j]

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(Signature and Date)

.14 Explain Public folders and how they interact with DMS. [ref. k]

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(Signature and Date)

.15 Explain the purpose of the DMDS. [ref. f, ch. 2]

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(Signature and Date)

.16 Discuss setting the following DMS message types: [ref. g, ch. 7]

a. Organizational Message
b. Exercise
c. Operation
d. Project
e. Drill
f. Other-Organizational

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(Signature and Date)

.17 Explain the Individual message (working record). [ref. g, ch. 3]

_____
(Signature and Date)

.18 Explain the procedures to build a Personal folder on U/A, and reason for pointing messages to this folder. [ref. k]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

125 DEFENSE MESSAGING SYSTEM (DMS) FUNDAMENTALS (CONT'D)

125.19 Explain how to add an additional address book to an outlook profile. [ref. k]

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(Signature and Date)

.20 Explain how to verify DMS version on a DMS client. [ref. i]

_____
(Signature and Date)

.21 State the purpose of the Database Manager. [ref. l, sec.4]

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(Signature and Date)

.22 Define the 4 different types of profiles. [ref l, sec. 3]

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(Signature and Date)

.23 Discuss the function of each profile. [ref l, sec.3]

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(Signature and Date)

.24 Explain the purpose of the different types of profiles. [ref. l, sec 3]

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(Signature and Date)

.25 Discuss how key words interact with DMDS. [ref. l, sec. 3]

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(Signature and Date)

.26 Explain the function and purpose of each DMDS tab. [ref. l, sec. 3]

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(Signature and Date)

.27 State where DMDS Profiler software is stored. [ref. l, sec. 2]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

125 DEFENSE MESSAGING SYSTEM (DMS) FUNDAMENTALS (CONT'D)

125.28 Explain the purpose of using an outlook profile in DMDS. [ref. l, sec. 2]

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(Signature and Date)

.29 Explain the importance of selecting the correct Input path. [ref. l sec, 2]

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(Signature and Date)

.30 Explain how the Personal Address Book interacts with DMDS. [ref. k]

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(Signature and Date)

.31 Explain the process of how a message is disseminated from the DMDS Profiler to its destination. [ref. k]

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(Signature and Date)

.32 State the minimum hardware requirements for the DMDS workstation. [ref. l, sec. 1]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

126 NAVAL TACTICAL COMMAND SUPPORT SYSTEMS (NTCSS) FUNDAMENTALS

References:

[a] Naval Tactical Command Support System (NTCSS), Systems Administration Guide NSN: 0913-LP-103-7093
[b] Local Standard Operating Procedures (SOP)

126.1 Explain the steps for creating a Make Recovery disk. [ref. a, ch. 8]

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(Signature and Date)

.2 Explain the procedures that are taken to prep the NTCSS system for End of Month Lives. [ref. b]

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(Signature and Date)

.3 Explain the different options available in Sybase versus root. [ref. a, chs. 4, 10]

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(Signature and Date)

.4 Explain what kind of information is displayed in the system reports. [ref. a, ch. 9]

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(Signature and Date)

.5 Discuss the steps to display an individual printers status. [ref. a, ch. 11]

_____
(Signature and Date)

.6 Explain how to check root's mail and what kind of information is displayed. [ref. a, ch. 11]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

126 NAVAL TACTICAL COMMAND SUPPORT SYSTEMS (NTCSS) FUNDAMENTALS (CONT'D)

126.7 Explain the steps to initiate a manual backup. [ref a, ch. 8]

_____
(Signature and Date)

.8 Explain how to verify system interfaces. [ref. a, ch. 12]

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

127 COMBINED ENTERPRISE REGIONAL INFORMATION EXCHANGE SYSTEM (CENTRIXS) FUNDAMENTALS

References:

[a] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications
[b] 2006 SPAWAR C4ISR CD (SIMP, FNG, AND MISC INFO).

127.1 Explain the purpose of the different CENTRIXS enclaves: [ref. a, ch. 7]

a. CNFC
b. GCTF
c. CFE
d. MCFI
e. CNFJ
f. CNFK
g. CMFP
h. NIDTS

_____
(Signature and Date)

.2 Explain the services provided by each CENTRIXS enclave. [ref. a, ch. 7]

_____
(Signature and Date)

.3 Explain the purpose of High Assurance Guard. [ref. a, ch. 7]

_____
(Signature and Date)

.4 Explain the use of SIPRNET to CENTRIXS cross domain solution. [ref. a, ch. 2]

_____
(Signature and Date)

.5 Discuss mail guard usage. [ref. a, ch. 7]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

127 COMBINED ENTERPRISE REGIONAL INFORMATION EXCHANGE SYSTEM (CENTRIXS) FUNDAMENTALS (CONT'D)

127.6 Explain the requirements for Radiant Mercury guard. [ref. b]

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(Signature and Date)

.7 Explain the requirements for Reverse OWL guard. [ref. a, ch. 2]

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(Signature and Date)

.8 Explain the requirements for New Generation DII guard. [ref. b]

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(Signature and Date)

.9 Explain the flow of an email from a SIPRNET user to a CENTRIXS user. [ref. a, ch. 7]

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(Signature and Date)

.10 Discuss the file extensions currently permitted as attachments in an e-mail. [ref. b]

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(Signature and Date)

.11 Explain how emails must be formatted for CENTRIXS. [ref. a, ch. 7]

_____
(Signature and Date)

.12 Discuss how an outage on SIPRNET affects CENTRIXS connectivity. [ref. a, ch. 7]

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(Signature and Date)

.13 Discuss Air Gap replication, including how often information is replicated. [ref. b]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

127 COMBINED ENTERPRISE REGIONAL INFORMATION EXCHANGE SYSTEM (CENTRIXS) FUNDAMENTALS (CONT'D)

127.14 Explain the function of MTA. [ref. a, ch. 2]

_____
(Signature and Date)

.15 Discuss the primary function of C2PC. [ref. a, ch. 7; ref. b]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

128 COLLABORATION AT SEA (CAS) FUNDAMENTALS

References:

[a] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications
[b] 2006 SPAWAR C4ISR CD (SIMP, FNG, AND MISC INFO)

128.1 Discuss the use of the Registration portal. [ref. b]

_____
[Signature and Date]

.2 Discuss how to create a CAS account. [ref. b]

_____
[Signature and Date]

.3 Discuss how to edit a CAS account. [ref. b]

_____
[Signature and Date]

.4 Discuss how to look up a CAS account. [ref. b]

_____
[Signature and Date]

.5 Discuss when and how to reset a CAS account password. [ref. b]

_____
[Signature and Date]

.6 Discuss locked CAS accounts. [ref. b]

_____
[Signature and Date]

.7 Explain the use of CAS. [ref. a, ch. 8; ref. b]

_____
[Signature and Date]

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

129 GLOBAL COMMAND AND CONTROL SYSTEM – MARITIME (GCCS-M) FUNDAMENTALS

References:

[a] Global Command and Control System – Maritime (GCCS-M) Manufacturer's PC Operating Manual
[b] Global Command and Control System – Maritime (GCCS-M) Afloat System Administration Course
[c] Global Command and Control System – Maritime (GCCS-M) Defense Information Infrastructure (DII) / Common Operating Environment (COE) 3.1 Basic System Administration Tools

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129.1 Discuss and define the following terms: [refs. a thru c]

a. Quick load Process
b. DAT (4MM/8MM)
c. Xterm
d. Tracks
e. Byte
f. Buffer
g. Cache
h. Copy
i. CPU
j. Cursor
k. Delete
l. Directories
m. Host file
n. ATO
o. File names
p. Formatting
q. Memory
r. Peripheral equipment
s. Quit
t. RAM
u. ROM
v. Save
w. Virus
x. Wild cards
y. JMHS
z. TTY
aa. PID
ab. USERNAME
ac. PRI
ad. NI
ae. SIZE
af. RES
ag. STATE
ah. TIME
ai. %WCPU
aj. COMMAND

_____
(Signature and Date)

.2 Discuss the roles and function of the following user profiles: [refs. b, c]

a. SECMAN
b. SYSADMIN
c. JMCIS
d. DBADMIN

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

129 GLOBAL COMMAND AND CONTROL SYSTEM – MARITIME (GCCS-M) FUNDAMENTALS (CONT'D)

129.3 Discuss and describe the use of the following UNIX commands: [refs. b, c]

a. time
b. ls
c. cd
d. md
e. rd
f. del
g. ren
h. cp
i. chkdsk
j. format
k. diskcopy
l. unformat
m. undelete
n. xcopy
o. mv
p. defrag
q. grep
r. mkdir
s. rmdir
t. rm
u. more
v. cat
w. head
x. tail
y. pwd

_____
(Signature and Date)

.4 Discuss the functions of the following GCCS-M Databases: [refs. b, c]

a. TDBM
b. GMI
c. RDBMS
d. NID
e. EPL
f. NERF
g. IMDB
h. REFDB
i. PROCSTORE
j. MHSSDS
k. MIDB

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

129 GLOBAL COMMAND AND CONTROL SYSTEM – MARITIME (GCCS-M) FUNDAMENTALS (CONT'D)

129.5 Explain the steps involved in the "Quick load" process. [refs. b, c]

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(Signature and Date)

.6 Explain the steps involved in the Segment loading process. [refs. b, c]

_____
(Signature and Date)

.7 Discuss the purpose and procedure of conducting daily/nightly reboots. [refs. b, c]

_____
(Signature and Date)

.8 Discuss the process of clearing out the TDBM. [refs. b, c]

_____
(Signature and Date)

.9 Discuss the purpose of Unix's Vi Editor and the associated operating modes. [refs. b, c]

_____
(Signature and Date)

.10 State the function of the following Vi editor's cursor/word/line movement commands: [refs. b, c]

a. H
b. J
c. K
d. L
e. #W
f. #B
g. #E
h. G
i. A
j. R
k. J
l. ZZ

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

130 NETWORK OPERATIONS CENTER (NOC) FUNDAMENTALS

References:

[a] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications, Ch. 2
[b] Global Communications Information Bulletin 3A (GCIB-3A)

130.1 Discuss the following sites, where they are located, what their functions are and which customers they service: [ref. a]

a. Defense Information Systems Agency
b. European Central Region Network Operations Center
c. Global Network Operations and Security Center
d. Indian Ocean Region Network Operations Center
e. Marine Corps Network Operations and Security Center
f. Navy Cyber Defense Operations Center
g. Navy Network Information Center
h. Navy Root DNS
i. NMCI
j. ONE-NET
k. Pacific Region Network Operations Center
l. Unified Atlantic Region Network Operations Center

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(Signature and Date)

.2 Define and describe the following terms: [ref. a]

a. ADMS/Legacy
b. ADNS
c. AoR
d. ATO/IATO
e. CHOP
f. DISN
g. HSGR
h. N2N
i. ENMS/TMS

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(Signature and Date)

.3 Describe the necessary information needed for an IP Services Request message. [ref. b, par. 5]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

131 COMMUNICATIONS WATCH OFFICER (CWO) FUNDAMENTALS

References:

[a] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications
[b] OPNAVINST 3120.32C, Standard Organization and Regulations of the U.S. Navy (SORM)
[c] NAVEDTRA 14222, Information Systems Technician Training Series, Module 1-Administration and Security
[d] Local Standard Operating Procedures (SOP)

131.1 Discuss the functions of the following areas: [ref. a, ch. 1; ref. d]

a. MPC (fleet center)
b. Technical/Facility Control
c. IWS

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(Signature and Date)

.2 Discuss the functions of the following communications watch stations: [ref. c, ch. 2; ref. d]

a. CWO
b. MPC Supervisor
c. Technical Control (TST) Supervisor
d. IWS

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(Signature and Date)

.3 Describe the functional relationships of communications to the following departments/individuals: [ref. b, ch. 3; ref. d]

a. CO
b. XO
c. Operations
d. CDO/OOD
e. NAVCOMMTELSTA/NCTAMS
f. RITSC
g. Earth stations
h. Communications/Radio Officer
i. Navigation
j. Combat systems/weapons
k. Engineering

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

131 COMMUNICATIONS WATCH OFFICER (CWO) FUNDAMENTALS (CONT'D)

131.3

l. Supply
m. Deck
n. Admin/Dental/Medical
o. Air detachment
p. Embarked staff
q. CSOOW

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

200 INTRODUCTION TO SYSTEMS

200.1 BASIC BUILDING BLOCKS

In this section, the equipment is broken down into smaller, more comprehensible, functional systems as basic building blocks in the learning process. Each system is written to reflect specific watchstation requirements by identifying the equipment most relevant to one or more designated watchstanders. The less complex systems may be identified and covered quickly or relegated to a lower priority to permit greater emphasis on more significant or complex systems.

200.2 COMPONENTS AND COMPONENT PARTS

For learning purposes each system is disassembled into two levels. Systems have components and components have parts. Do not expect to see every item which appears on a parts list to be in the PQS. Only those items which must be understood for operation/maintenance are listed. Normally a number of very broad (overview) systems are disassembled into their components or parts with the big picture as the learning goal. Items listed as components in such a system may then be analyzed as separate systems and broken down into components and parts. Example: the turbogenerators may be listed as a component of the Ship's Service Electrical Distribution system and then later detailed as an individual system for closer study.

200.3 FORMAT

Each system is organized within the following format:

- It lists the references to be used for study and asks you to explain the function of each system.
- It asks for the static facts of what or where the components and component parts are in relation to the system.
- It directs attention to the dynamics of how the component and component parts operate to make the system function.
- It specifies the parameters that must be immediately recalled.
- It requires study of the relationship between the system being studied and other systems or areas.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

200 INTRODUCTION TO SYSTEMS (CONT'D)

200.4 HOW TO COMPLETE

The systems you must complete are listed in the Prerequisites section of each watchstation. When you have mastered one or more systems, contact your Qualifier. The Qualifier will give you an oral examination on each system and, if satisfied you have sufficient knowledge of the system, will sign the appropriate system line items. You will be expected to demonstrate through oral or written examination a thorough understanding of each system required for your watchstation.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

201 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V2

References:

[a] NCTS 50C1012 OM-V2R11, Naval Modular Automated Communications System (NAVMACS) V-2 Operator's Manual
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat

GRAPHICS BASE LINE

201.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [ref. a, chs. 2, 3; refs. b, c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What protection is provided by this component/component part?
G. What are the probable indications if this component fails?
H. What is the source of control signals?
I. What is the function of each position?
J. What are the interlocks?

		Questions
201.1.1	NAVMACS V-2	A B C D G H
	a. AN/UYK-20(V) CPU front panel controls	A B G
	1. Circuit breaker on/off switch	A B G
	2. Blower power on/off switch	A B G
	3. Blower power indicator	A B G
	4. Logic power on/off switch	A B G
	5. Logic power indicator	A B G
	6. Power fault indicator	A B G
	7. Power fault CLR switch	A B G
	8. Program fault indicator	A B G
	9. Program fault CLR switch	A B G
	10. Program run indicator	A B G

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

201 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 (CONT'D)

				Questions
201.1.1	a.	11.	Over temperature indicator	A B G
		12.	Audible alarm	A B G
		13.	Alarm enable/disable/test	A B G
		14.	Battle short on/off switch	A B E F G
		15.	Battle short indicator	A B E F G
		16.	Bootstrap 1-2 switch	A B G
		17.	Load/stop switch	A B G
		18.	Auto start/start switch	A B G
		19.	Stop switch	A B G
		20.	MA clear push button switch	A B G
		21.	Program run indicator/switch	A B G
		22.	Power fault indicator/switch	A B G
		23.	Program fault indicator/switch	A B G
		24.	Program stop indicator	A B G
		25.	Program stop 1/off switch	A B G
		26.	Program stop 2/off switch	A B G
		27.	Mode micro step indicator/switch	A B G
		28.	Mode OP step indicator/switch	A B G
		29.	Mode run indicator/switch	A B G
		30.	Processor disable RT CLK disable/Int/Ext switch	A B G
		31.	Processor disable ADV P switch	A B G
		32.	Processor disable intercomputer time out switch	A B G
		33.	Break PT read/off switch	A B G
		34.	Break PT write/off switch	A B G
		35.	Diagnostic JP switch	A B G
		36.	Diagnostic display switch	A B G
		37.	Register/data 0 through 15 indicators/switches	A B G
		38.	Alter mode set/clear switch	A B G
		39.	Register/data SWT/CLR push button	A B G
		40.	Micro ADRS indicator/switch	A B G
		41.	Micro INSTR indicator/switch	A B G
		42.	Normal DSPL indicator/switch	A B G
		43.	INSTR REG indicator/switch	A B G
		44.	GENL DISP indicator/switch	A B G
		45.	GENL REG indicator/switch	A B G
		46.	Display number 3, 2, 1, 0 indicators/switches	A B G
		47.	Display select CLR switch	A B G
		48.	Time meter	A B G

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

201 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 (CONT'D)

			Questions
201.1.1	b.	CV-3022/UG controls	A B G
		1. Power on/off switch	A B G
		2. Channel monitor selector switch	A B G
		3. Channel monitor (loop current meter)	A B G
		4. 130 Vdc indicator	A B G
		5. 115 Vdc indicator	A B G
		6. Teletype current adjust	A B G
		7. Patching channels	A B G
	c.	Controls on the TT-624(V)/UG line printer	A B C D G J
	d.	RD-396(V)1/U cassette magnetic tape unit	A B C D G J
		1. Equipment front panel	A B
		(a) Power on/off switch	A B G
		(b) Power indicator	A B G
		(c) Recorder select switch	A B G
		2. Recorder control panel(s)	A B G
		3. Read/write heads	A B G
	e.	AN/USH-26(V) CMTU	A B C D E G I
		1. Front panel	A B G
		(a) Master clear switch	A B G
		(b) Over temperature indicator	A B G
		(c) Alarm enable/off/test switch	A B G
		(d) Bat short on/off switch	A B G
		(e) Bat short indicator	A B G
		(f) Power indicator	A B G
		(g) Power on/off switch	A B G
		(h) CMPTR1 indicator	A B G
		(i) CMPTR2 indicator	A B G
		(j) CMPTR1/MPX/CMPTR2 switch	A B G I
		(k) Drive operator INT indicator	A B G
		(l) Drive busy indicator	A B G
		(m) Drive safe indicator	A B G
		(n) Drive select indicator	A B G
		(o) Audible alarm	A B G
		2. Tape drive assembly	A B G
		(a) Drive hot indicator	A B F G
		(b) Drive online/offline switch	A B G
		(c) Drive eject/unload control	A B G
		(d) CMTU time meter	A B G

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

201 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 (CONT'D)

			Questions
201.1.1	f.	RD-397(V)/U HSPTR/P	A B C D E G
		1. Power switch	A B G
		2. Power indicator	A B G
		3. Rewind/off/take-up switch	A B G I
		4. Remote/dupe/test switch	A B G I
		5. Punch/off/leader switch	A B G I
		6. Slew left/right switch	A B G I
		7. Online/load switch	A B G I
		8. Read/start push button/indicator	A B G I
		9. Tape level 5-8-7 switch	A B G I

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(Signature and Date)

201.2 PRINCIPLES OF OPERATION

201.2.1 How do the components work together to achieve the system's function? [refs. a thru c]

.2 What indications are received if the system is malfunctioning? [ref. a, ch. 12, app. B; ref. c]

_____
(Signature and Date)

201.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

201.4 SYSTEM INTERFACE

201.4.1 How do the following outside influences affect the operation of this system: [ref. a, ch. 12; ref. c]

a. Loss of air-conditioning
b. Loss of 400 Hz power

.2 How does this system interface with the following: [refs. b, c]

a. NOW terminal
b. AN/UGC-143 keyboard (if applicable)
c. CUDIXS

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

201 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 (CONT'D)

201.5 SAFETY PRECAUTIONS

201.5.1 What safety precautions must be observed when operating this system? [ref. d]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

202 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II)

References:

[a] EE685-CM-SUM-010/NAVMACSII (HP) (Rev. 01), Naval Modular Automated Communications System II, (NAVMACS II), AN/SYQ-7A(V) & 7B(V) System User Manual, Volume 1, Operational Procedures and Instructions
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20

202.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [ref. a, ch. 2; refs. b, c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What protection is provided by this component/component part?
G. What are the probable indications if this component fails?
H. What is the source of control signals?
I. What is the function of each position?
J. What are the interlocks?

		Questions
202.1.1	NAVMACS II	A B C D F G H
	a. AN/SYQ-7A(V)	A B C D G I J
	1. Circuit breaker on/off switch	A B G
	2. Blower power on/off switch	A B G
	3. Blower power indicator	A B G
	4. Over temperature indicator	A B G
	5. Audible alarm	A B G
	6. Alarm enable/disable/test	A B G
	7. Battle short on/off switch	A B E F G
	8. Battle short indicator	A B E F G

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

202 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) (CONT'D)

			Questions
202.1.1	b.	Keyboard	A B G
	c.	Monitor	A B C G
	d.	CPU	A B C G
	e.	Printer	A B C G
	f.	UPS	A B C F G
	g.	Associated crypto	A B C D G H
	h.	X terminal	A B C D G I
	i.	VME chassis	A B C D G I
		1. 3.5 floppy drive	A B G
		2. 5.25 floppy drive	A B G
		3. DVD drive	A B G
	j.	DAT tape drive	A B G
	k.	Broadcast	A B C D G H I
	l.	FSM	A B C D G H I
	m.	CUDIXS	A B C D G H I
	n.	Afloat SHF GATEGUARD	A B C D G H I

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(Signature and Date)

202.2 PRINCIPLES OF OPERATION

202.2.1 Draw a block diagram of the following systems and show the path: [refs. b, c]

a. CUDIX
b. Fleet broadcast
c. FSM
d. Afloat GATEGUARD

.2 Explain the proper power up/power down procedures. [refs. b, c]

.3 What indications are received if the system is malfunctioning? [ref. c]

_____

(Signature and Date)

202.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

202 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) (CONT'D)

202.4 SYSTEM INTERFACE

202.4.1 How do the following outside influences affect the operation of this system: [refs. b, c]

a. Loss of 400 Hz power
b. Loss of air-conditioning

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(Signature and Date)

202.5 SAFETY PRECAUTIONS

202.5.1 What safety precautions must be observed when operating this system? [refs. d, e]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

203 SA-2112(V)/STQ SINGLE AUDIO SYSTEM (SAS) (RED)

References:

[a] EE107-AA-OMI-010/E110SA 2112 CHG1, Operation and Maintenance Instructions, Switching Matrix, SA-2112 (V)/STQ
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20

203.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [ref. a, ch. 4; refs. b, c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What protection is provided by this component/component part?
E. What is the function of each position?

		Questions
203.1.1	SA-2112(V)/STQ SAS (red)	A
	a. Control and status panel	A B C
	1. MONITOR PLAIN/CIPHER indicators/selectors	A B
	2. MONITOR DETECT/PTT ON/DISCONNECT indicators	A B
	3. Local/remote MODE selector	A B E
	4. FUNCTION CLEAR selector	A B
	5. MONITOR connect/disconnect selector	A B E
	6. PROGRAM assign/deny selector	A B E
	7. STATUS CONNECT selector	A B
	8. STATUS ASSIGN selector	A B
	9. STATUS MONITOR, CONNECT, ASSIGN, TRUNK/SHORT affected selector	A B E
	10. LINE/CHANNEL/TRUNK selector/LED display	A B E

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

203 SA-2112(V)/STQ SINGLE AUDIO SYSTEM (SAS) (RED) (CONT'D)

				Questions
203.1.1	a.	11.	Operation ILLEGAL/UNAVAILABLE/COMPLETE lights	A B
		12.	Status OVERFLOW selector	A B
		13.	Keyboard numerals and CLEAR button	A B
		14.	ENTER selector	A B
		15.	FAULT OVERFLOW selector/LED display	A B
		16.	ALARM SILENCE/FAULT RESET selectors	A B
		17.	PANEL TEST selector	A B
	b.		Power supply panel	A B C
		1.	Circuit breakers	A B D
		2.	Blower fuses	A B
		3.	Hours meter	A B
	c.		Air intake panel	A B
		1.	Input power switch	A B
		2.	AC power indicator	A B
.2	Telephone sets			A B C
	a.		PTT/HOOK switch	A B
	b.		PLAIN/CIPHER/DISCONNECT/DETECT indicators	A B
	c.		REMOTE CHANNEL SELECT	A B
		1.	REQUEST push button	A B
		2.	Dim control	A B
		3.	READY/NO ACCESS indicators	A B

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(Signature and Date)

203.2 PRINCIPLES OF OPERATION

203.2.1 How do the components work together to achieve the system's function? [ref. a, ch. 4]

.2 State the proper procedure of the following: [ref. a, ch. 4]

a. Select a channel from a remote telephone set
b. Perform manual patching
c. Assign lines/channels/trunks

.3 What indications are received if the system is malfunctioning? [ref. a, ch. 7]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

203 SA-2112(V)/STQ SINGLE AUDIO SYSTEM (SAS) (RED) (CONT'D)

203.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

203.4 SYSTEM INTERFACE

203.4.1 How does a loss of electrical power affect the operation of this system? [ref. a, ch. 7]

.2 How does this system interface with the following: [ref. a, ch. 8]

a. Secure voice systems
b. Non-secure voice systems
c. EMS

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(Signature and Date)

203.5 SAFETY PRECAUTIONS

203.5.1 What safety precautions must be observed when operating this system? [refs. d, e]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

204 SA-2112A(V)/STQ SINGLE AUDIO SYSTEM (SAS) (BLACK)

References:

[a] SA-2112A (V) STQ-Single Audio System (SAS) Applicable Manufacturer's Technical Manual
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20

204.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c]

A. What is its function?
B. Where is it located?

		Questions
204.1.1	SA-2112A(V)/STQ SAS (black)	A
a.	PTT ON indicator	A B
b.	Mode selector	A B
c.	FUNCTION CLEAR button	A B
d.	MONITOR connect/disconnect button	A B
e.	PROGRAM connect/disconnect button	A B
f.	STATUS CONNECT pushbutton	A B
g.	STATUS MONITOR pushbutton	A B
h.	Status TRK SHT/LN AFCTD pushbutton	A B
i.	OPERATION ILLEGAL indicator light	A B
j.	OPERATION UNAVAILABLE indicator light	A B
k.	OPERATION COMPLETE indicator light	A B
l.	STATUS OVERFLOW pushbutton	A B
m.	ENTER pushbutton	A B
n.	FAULT NUMBER/LOCATION display	A B
o.	FAULT OVERFLOW pushbutton	A B

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

204 SA-2112A(V)/STQ SINGLE AUDIO SYSTEM (SAS) (BLACK) (CONT'D)

			Questions
204.1.1	p.	ALARM SILENCE pushbutton	A B
	q.	FAULT RESET pushbutton	A B
	r.	BATTLE SHORT switch	A B
	s.	LAMP TEST pushbutton	A B
	t.	Hand set	A B

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(Signature and Date)

204.2 PRINCIPLES OF OPERATION

204.2.1 How do the components work together to achieve the system's function? [refs. a thru c]

.2 Explain the proper procedures to: [refs. a thru c]

a. Energize set
b. Program line-to-trunk connection
c. Monitor connection
d. Upload/download system configuration

.3 What indications are received if the system is malfunctioning? [ref. a]

_____
(Signature and Date)

204.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

204.4 SYSTEM INTERFACE

204.4.1 How does a loss of electrical power affect the operation of this system? [ref. a]

.2 How does this system interface with the following: [ref. a]

a. Audio-terminal equipment
b. MF/HF transmitters/receivers
c. UHF/VHF transmitters/receivers/transceivers
d. HFRG
e. EMS

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

204 SA-2112A(V)/STQ SINGLE AUDIO SYSTEM (SAS) (BLACK) (CONT'D)

204.5 SAFETY PRECAUTIONS

204.5.1 What safety precautions must be observed when operating this system? [refs. d, e]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

205 AUTOMATED NETWORK CONTROL CENTER (ANCC)

References:

[a] Automated Network Control Center (ANCC) Applicable Manufacturer's Technical Manual
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20

205.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the probable indications if this component fails?

		Questions
205.1.1	ANCC	A B C D
a.	RIU	A B C D
b.	RMSA 2000 RED/BLACK	A B C D
c.	RMSA 4000	A B C D
d.	SPS 64	A B C D
e.	MPS 16	A B C D
f.	System Control Processor	A B C D
g.	MCM-16	A B C D
h.	PIM	A B C D
i.	AIM 800	A B C D
j.	DIM-414-3	A B C D
k.	DIH-264	A B C D
l.	DTB/DTB-530	A B C D
m.	DCB/DCB-530	A B C D

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

205 AUTOMATED NETWORK CONTROL CENTER (ANCC) (CONT'D)

			Questions
205.1.1	n.	DIU-6HS	A B C D
	o.	DIU-6LS	A B C D
	p.	IXS	A B C D

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(Signature and Date)

205.2 PRINCIPLES OF OPERATION

205.2.1 How do the components work together to achieve the system's function? [refs. a thru c]

.2 What indications are received if the system is malfunctioning? [refs. a thru c]

.3 Explain the following functions: [ref. a]

a. FILTER ON CCSD
b. Macro
c. Query
d. Test
e. Loopback
f. Unloop
g. Connect/Disconnect Test
h. Connect/Disconnect Ports
i. MTRX Outage
j. Broadcast Connect/Disconnect

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(Signature and Date)

205.3 PARAMETERS/OPERATING LIMITS: – None to be discussed.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

205 AUTOMATED NETWORK CONTROL CENTER (ANCC) (CONT'D)

205.4 SYSTEM INTERFACE

205.4.1 How do the following influences affect the operation of this system: [refs. b, c]

a. Loss/fluctuation of electrical power
b. Loss of power supply
c. Corrupt database

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(Signature and Date)

205.5 SAFETY PRECAUTIONS

205.5.1 What safety precautions must be observed when operating this system? [refs. d, e]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

206 AN/USQ-155 (V)1 TACTICAL VARIANT SWITCH (TVS)

References:

[a] AN/USQ-155 (V) Tactical Variant Switch (TVS) Manufacturer's Technical Manual
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat

206.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What protection is provided by this component/component part?
E. What is the function of each position?

206.1.1 AN/USQ-155 (V)1- TVS	Questions A B C E
a. Control and status panel	A B C
1. Control PC with CorScan	A B
2. Interface Control Processor	A B
3. Red Conference Switch	A B E
4. Black Tactical Switch	A B
5. Red Matrix Engine	A B E
6. I/O Cards	A B E
7. Recorder PCU	A B
8. Trunk PCU	A B
9. Private Branch Exchange	A B E
10. Black Matrix Unit	A B E
11. Line PCU	A B
12. PCU Chassis	A B

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

206 AN/USQ-155 (V)1 TACTICAL VARIANT SWITCH (TVS) (CONT'D)

			Questions
206.1.1	b.	Power supply panel	A B C
		1. Circuit breakers	A B D
		2. Blower fuses	A B

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(Signature and Date)

206.2 PRINCIPLES OF OPERATION

206.2.1 How do the components work together to achieve the system's function? [ref. a]

.2 What is the proper procedure to: [ref. a]

a. Perform manual patching
b. Assign lines/channels/trunks

.3 What indications are received if the system is malfunctioning? [ref. a]

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(Signature and Date)

206.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

206.4 SYSTEM INTERFACE

206.4.1 How does a loss of electrical power affect the operation of this system? [ref. a]

.2 How does this system interface with the following: [ref. a]

a. Secure voice systems
b. Non-secure voice systems

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

206 AN/USQ-155 (V)1 TACTICAL VARIANT SWITCH (TVS) (CONT'D)

206.5 SAFETY PRECAUTIONS

206.5.1 What safety precautions must be observed when operating this system? [ref. d]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

207 FLEET SINGLE-CHANNEL RADIO TELETYPEWRITER BROADCAST (TYPE M) SYSTEM

References:

[a] SPAWARINST 2700.1, Communications Quality Monitoring System, Ch. 4, Sec. 5
[b] Local Standard Operating Procedures (SOP)
[c] Combat System Operational Sequencing System (CSOSS)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat

GRAPHICS BASE LINE

207.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What protection is provided by this component/component part?
F. What are the probable indications if this component fails?
G. What is the source of control signals?
H. What is the function of each position?

		Questions
207.1.1	Fleet single-channel radio teletypewriter broadcast (type M) system	A C D F G
.2	Receive antenna	A B F G
.3	Receive antenna patch panel	A B F
.4	Receive antenna filter/coupler	A B F
.5	Receiver	A B D F G H
.6	Receiver transfer switchboard (patch panel)	A B F
.7	Converter/comparator group	A B D F G H
.8	Black patch panel	A B F
.9	Associated crypto devices	A B C D E F G H
.10	Red patch panel	A B F
.11	NOW/NAVMACS	A B C F G

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

207 FLEET SINGLE-CHANNEL RADIO TELETYPEWRITER BROADCAST (TYPE M) SYSTEM (CONT'D)

207.2 PRINCIPLES OF OPERATION

207.2.1 How do the components work together to achieve the system's function? [refs. a thru c]

.2 Draw a diagram of this system and show the path of: [refs. b, c]

a. RF from the antenna to receiver
b. AF from the receiver to the converter/comparator
c. dc from the converter/comparator to the NOW terminal

.3 What indications are received if the system is malfunctioning? [refs. a, c]

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(Signature and Date)

207.3 PARAMETERS/OPERATING LIMITS

For the items listed, answer the following questions: [ref. a]

A. What is the normal operating value?
B. What is the allowable operating limits?
C. Where are the parameters sensed or monitored?
D. What is the physical location of the indicators?

		Questions
207.3.1	Receiver audio output level	A B C D
.2	Red/Black patch panel monitoring	A B C D
.3	Converter/comparator levels	A B C D

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

207 FLEET SINGLE-CHANNEL RADIO TELETYPEWRITER BROADCAST (TYPE M) SYSTEM (CONT'D)

207.4 SYSTEM INTERFACE

207.4.1 How do the following outside influences affect the operation of this system: [refs. a, c]

a. Adverse atmospheric conditions
b. Loss of signal
c. Shipboard RFI

.2 How does this system interface with NAVMACS? [refs. b, c]

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(Signature and Date)

207.5 SAFETY PRECAUTIONS

207.5.1 What safety precautions must be observed when operating this system? [ref. d]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

208 FLEET MULTI-CHANNEL RADIO TELETYPEWRITER BROADCAST (TYPE N) SYSTEM

References:

[a] SPAWARINST 2700.1, Communications Quality Monitoring System, Ch. 4, Sec. 6
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] EE132-AN-MMO-010/AN/USQ-122A(V) Technical Manual, USQ-122(V) Data Terminal Set

208.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c; ref. e]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What protection is provided by this component/component part?
G. What are the probable indications if this component fails?
H. What is the source of control signals?
I. What is the function of each position?

		Questions
208.1.1	Fleet multi-channel radio teletypewriter broadcast (type N) system	A C D G H
.2	Receive antenna	A B G H
.3	SSR-1	A B C D E G H I
.4	USQ-122A(V) High Speed Fleet BCST System	A B C D E F G H I
.5	Black patch panel	A B G
.6	Associated crypto devices	A B C D F G H I
.7	Red patch panel	A B G
.8	NOW/NAVMACS	A B C G H

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

208 FLEET MULTI-CHANNEL RADIO TELETYPEWRITER BROADCAST (TYPE N) SYSTEM (CONT'D)

208.2 PRINCIPLES OF OPERATION

208.2.1 How do the components work together to achieve the system's function? [refs. a thru c]

.2 Draw a diagram of this system and show the path of: [refs. a thru c]

a. RF from the antenna to the receiver
b. AF from the receiver to the multi-channel terminal equipment
c. dc from the multi-channel terminal equipment to the printer

.3 What indications are received if the system is malfunctioning? [ref. b]

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(Signature and Date)

208.3 PARAMETERS/OPERATING LIMITS

For the items listed, answer the following questions: [refs. a thru c]

A. What is the normal operating value?
B. What are the allowable operating limits?
C. Where are the parameters sensed or monitored?
D. What is the physical location of the indicators?

		Questions
208.3.1	Red/Black patch panel monitoring	A B C D
.2	Terminal equipment levels	A B C D

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

208 FLEET MULTI-CHANNEL RADIO TELETYPEWRITER BROADCAST (TYPE N) SYSTEM (CONT'D)

208.4 SYSTEM INTERFACE

208.4.1 How do the following outside influences affect the operation of this system: [refs. a, c]

a. Adverse atmospheric conditions
b. Loss of signal/satellite
c. Shipboard RFI

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(Signature and Date)

208.5 SAFETY PRECAUTIONS

208.5.1 What safety precautions must be observed when operating this system? [ref. d]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

209 HIGH FREQUENCY (HF) RADIO TELETYPEWRITER SHIP/SHORE/SHIP (TYPE D/G) SYSTEM

References:

[a] Applicable High Frequency (HF) Radio Teletypewriter Technical Manual
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20

209.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What protection is provided by this component/component part?
G. What are the probable indications if this component fails?
H. What is the source of control signals?
I. What is the function of each position?

		Questions
209.1.1	HF Radio teletypewriter ship/shore/ship (type D/G) system	A C D G H
.2	Receive antenna	A B C D G H
.3	Receive antenna patch panel	A B G
.4	Receive antenna filter/coupler	A B C D G H
.5	Receiver	A B C D E F G H I
.6	Receiver transfer switchboard (patch panel)	A B G H I
.7	Tone terminal equipment (send/receive)	A B G H
.8	Black patch panel	A B G
.9	Associated crypto devices	A B C D F G H I
.10	Red patch panel	A B G

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

209 HIGH FREQUENCY (HF) RADIO TELETYPEWRITER SHIP/SHORE/SHIP (TYPE D/G) (CONT'D)

		Questions
209.1.11	NOW/NAVMACS	A B C G H
.12	Crypto remote control transfer panel	A B G H
.13	Crypto remote control	A B G H
.14	Transmitter transfer switchboard (patch panel)	A B G H
.15	Transmitter	A B C D G H I
.16	Transmitter coupler	A B C D G
.17	Converter	A B C D G
.18	Amplifier	A B C D G
.19	Transmitter antenna patch panel	A B G
.20	Transmitter antenna	A B C D E G H
.21	Transmitter remote control	A B G H

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(Signature and Date)

209.2 PRINCIPLES OF OPERATION

209.2.1 How do the components work together to achieve the system's function? [refs. a thru c]

.2 Draw a diagram of Delta/Golf systems and show the signal flow. [refs. b, c]

.3 What indications are received if the system is malfunctioning? [ref. c]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

209 HIGH FREQUENCY (HF) RADIO TELETYPEWRITER SHIP/SHORE/SHIP (TYPE D/G) (CONT'D)

209.3 PARAMETERS/OPERATING LIMITS

For the items listed, answer the following questions: [refs. a thru c]

A. What is the normal operating value?
B. What are the allowable operating limits?
C. Where are the parameters sensed or monitored?
D. What is the physical location of the indicators?

		Questions
209.3.1	Receiver audio output level	A B C D
.2	Terminal equipment receive audio level	A B C D
.3	Terminal equipment send level	A B C D
.4	Red/Black Patch panel monitoring	A B C D
.5	Transmit power level	A B C D
.6	Voltage standing-wave ratio	A B C D

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(Signature and Date)

209.4 SYSTEM INTERFACE

209.4.1 How do the following influences affect the operation of this system: [refs. b, c]

a. Adverse atmospheric conditions
b. Loss of signal
c. Loss of power
d. Shipboard RFI

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(Signature and Date)

209.5 SAFETY PRECAUTIONS

209.5.1 What safety precautions must be observed when operating this system? [refs. d, e]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

210 BATTLE FORCE EMAIL (BFEM) SYSTEM

References:

[a] Battle Force Electronic Mail System Operating Manual
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat

210.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What are the probable indications if this component fails?
G. What is the function of each position?

		Questions
210.1.1	BFEM system	A B C D E F
a.	Client	A B C
b.	Server	A B C G
c.	Ethernet LAN (4 port hub)	A B
d.	Level converter	A B C
e.	Crypto device	A B C D F
f.	HF modem	A B C D G
g.	HF transmitter	A B C D G
h.	HF receiver	A B C D G

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

210 BATTLE FORCE EMAIL (BFEM) SYSTEM (CONT'D)

210.2 PRINCIPLES OF OPERATION

210.2.1 How do the components work together to achieve the system's function? [ref. a]

.2 What indications are received if the system is malfunctioning? [ref. a]

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(Signature and Date)

210.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

210.4 SYSTEM INTERFACE

210.4.1 How do the following outside influences affect the operation of this system:

a. Adverse atmospheric conditions [refs. b, c]
b. Loss/fluctuation of electrical power [refs. b, c]
c. Loss of air-conditioning [refs. b, c]
d. Incorrect STANAG address listing [ref. a]

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(Signature and Date)

210.5 SAFETY PRECAUTIONS

210.5.1 What safety precautions must be observed when operating this system? [ref. d]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

211 HIGH FREQUENCY (HF) NON-SECURE VOICE (TYPE Y) SYSTEM

References:

[a] SPAWARINST 2700.1, Communications Quality Monitoring System, Ch. 4, Sec. 13
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20

211.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What protection is provided by this component/component part?
G. What are the probable indications if this component fails?
H. What is the source of control signals?
I. What is the function of each position?

		Questions
211.1.1	HF non-secure voice (type Y) system	A C D E G H
.2	Receiver antenna	A B C D G H I
.3	Receiver antenna patch panel	A B C D G H
.4	Receiver antenna coupler/filter	A B G
.5	Receiver	A B C D G H I
.6	Receiver transfer switchboard (patch panel)	A B G
.7	Associated crypto devices	A B C D G F H I
.8	Remote switching unit (matrix)	A B C D F G H I
.9	SVPA	A B G
.10	Transmitter transfer switchboard (patch panel)	A B G

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

211 HIGH FREQUENCY (HF) NON-SECURE VOICE (TYPE Y) SYSTEM (CONT'D)

		Questions
211.1.11	Transmitter	A B C D G H I
.12	Transmitter antenna patch panel	A B G
.13	Transmitter antenna coupler	A B G
.14	Transmitter antenna	A B

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(Signature and Date)

211.2 PRINCIPLES OF OPERATION

211.2.1 Draw a diagram of this system and show signal flow. [refs. a thru c]

.2 How do the components work together to achieve the system's function? [refs. a thru c]

.3 What indications are received if the system is malfunctioning? [refs. a, c]

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(Signature and Date)

211.3 PARAMETERS/OPERATING LIMITS

For the items listed, answer the following questions: [refs. a thru c]

A. What is the normal operating value?
B. What are the allowable operating limits?
C. Where are the parameters sensed or monitored?
D. What is the physical location of the indicators?

		Questions
211.3.1	Receiver audio levels	A B C D
.2	Transmitter output power levels	A B C D
.3	Voltage standing-wave ratio	A B C D

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

211 HIGH FREQUENCY (HF) NON-SECURE VOICE (TYPE Y) SYSTEM (CONT'D)

211.4 SYSTEM INTERFACE

211.4.1 How do the following influences affect the operation of this system: [refs. a, c]

a. Adverse atmospheric conditions
b. Loss of signal
c. Shipboard RFI
d. Loss of power

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(Signature and Date)

211.5 SAFETY PRECAUTIONS

211.5.1 What safety precautions must be observed when operating this system? [refs. d, e]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

212 HIGH FREQUENCY (HF) SECURE VOICE (TYPE S) SYSTEM

References:

[a] Combat System Operational Sequencing System (CSOSS)
[b] Local Standard Operating Procedures (SOP)
[c] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[d] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20

212.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a, b]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What protection is provided by this component/component part?
G. What are the probable indications if this component fails?
H. What is the source of control signals?
I. What is the function of each position?

		Questions
212.1.1	HF secure voice (type S) system	A C D G H
.2	Receiver antenna	A B C D G H I
.3	Receiver antenna patch panel	A B C D G H
.4	Receiver antenna coupler/filter	A B G
.5	Receiver	A B C D G H I
.6	Receiver transfer switchboard (patch panel)	A B G
.7	Associated crypto devices	A B C D F G H I
.8	Remote switching unit (matrix)	A B C D E G H I
.9	SVPA	A B G
.10	Transmitter transfer switchboard (patch panel)	A B G
.11	Transmitter	A B C D G H I
.12	Transmitter antenna patch panel	A B G
.13	Transmitter antenna coupler	A B G
.14	Transmitter antenna	A B

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

212 HIGH FREQUENCY (HF) SECURE VOICE (TYPE S) SYSTEM (CONT'D)

212.2 PRINCIPLES OF OPERATION

212.2.1 Draw a diagram of this system and show signal flow. [refs. a, b]

.2 How do the components work together to achieve the system's function? [refs. a, b]

.3 What indications are received if the system is malfunctioning? [ref. b]

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(Signature and Date)

212.3 PARAMETERS/OPERATING LIMITS

For the items listed, answer the following questions: [ref. a]

A. What is the normal operating value?
B. What are the allowable operating limits?
C. Where are the parameters sensed or monitored?
D. What is the physical location of the indicators?

		Questions
212.3.1	Receiver audio levels	A B C D
.2	Transmitter output power levels	A B C D
.3	Voltage standing-wave ratio	A B C D

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(Signature and Date)

212.4 SYSTEM INTERFACE

212.4.1 How do the following influences affect the operation of this system: [refs. a, b]

a. Adverse atmospheric conditions
b. Loss of signal
c. Shipboard RFI
d. Loss of power
e. Loss of crypto

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

212 HIGH FREQUENCY (HF) SECURE VOICE (TYPE S) SYSTEM (CONT'D)

212.5 SAFETY PRECAUTIONS

212.5.1 What safety precautions must be observed when operating this system? [refs. c, d]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

213 ULTRA HIGH FREQUENCY (UHF) RADIO TELETYPEWRITER (TYPE B/C) SYSTEM

References:

[a] Applicable Ultra High Frequency Radio Teletypewriter Tech Manual
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20

213.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What protection is provided by this component/component part?
G. What are the probable indications if this component fails?
H. What is the source of control signals?
I. What is the function of each position?

		Questions
213.1.1	UHF radio teletypewriter (type B/C) system	A C D G H
.2	Antenna	A B C D G H
.3	Antenna patch panel	A B G
.4	Antenna filter/coupler	A B C D G H
.5	Transceiver	A B C D E F G H I
.6	Receiver transfer switchboard (patch panel)	A B G H I
.7	Tone terminal equipment (send/receive)	A B G H
.8	Black patch panel	A B G
.9	Associated crypto devices	A B C D F G H I
.10	Red patch panel	A B G

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

213 ULTRA HIGH FREQUENCY (UHF) RADIO TELETYPEWRITER (TYPE B/C) SYSTEM (CONT'D)

		Questions
213.1.11	NOW/NAVMACS	A B C G H
.12	Crypto remote control transfer panel	A B G H
.13	Crypto remote control	A B G H
.14	Transmitter transfer switchboard (patch panel)	A B G H
.15	Transmitter remote control	A B G H
.16	Converter	A B G H
.17	Amplifiers	A B G H

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(Signature and Date)

213.2 PRINCIPLES OF OPERATION

213.2.1 Draw a diagram of both systems and show the signal flow. [refs. b, c]

.2 How do the components work together to achieve the system's function? [refs. a thru c]

.3 What indications are received if the system is malfunctioning? [ref. c]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

213 ULTRA HIGH FREQUENCY (UHF) RADIO TELETYPEWRITER (TYPE B/C) SYSTEM (CONT'D)

213.3 PARAMETERS/OPERATING LIMITS

For the items listed, answer the following questions: [refs. a thru c]

A. What is the normal operating value?
B. What are the allowable operating limits?
C. Where are the parameters sensed or monitored?
D. What is the physical location of the indicators?

		Questions
213.3.1	Receiver audio output level	A B C D
.2	Terminal equipment receive audio level	A B C D
.3	Terminal equipment send level	A B C D
.4	Black/Red patch panel monitoring	A B C D
.5	Transmit power level	A B C D
.6	Voltage standing-wave ratio	A B C D

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(Signature and Date)

213.4 SYSTEM INTERFACE

213.4.1 How do the following outside influences affect the operation of this system: [refs. b, c]

a. Scintillation
b. Loss of signal
c. Loss of dc power
d. Shipboard RFI

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(Signature and Date)

213.5 SAFETY PRECAUTIONS

213.5.1 What safety precautions must be observed when operating this system? [refs. d, e]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

214 ULTRA HIGH FREQUENCY (UHF) NON-SECURE VOICE (TYPE U) SYSTEM

References:

[a] SPAWARINST 2700.1, Communications Quality Monitoring System, Ch. 4, Sec. 11
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20

214.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What protection is provided by this component/component part?
G. What are the probable indications if this component fails?
H. What is the source of control signals?
I. What is the function of each position?

		Questions
214.1.1	UHF non-secure voice (type U) system	A C D G H
.2	Antenna	A C D G H I
.3	Antenna coupler	A B D G H
.4	Transceiver	A B C D E G H I
.5	Receiver transfer switchboard (patch panel)	A B G
.6	Associated crypto devices	A B C D F G H I
.7	Remote switching unit (matrix)	A B C D E G H I
.8	SVPA	A B G
.9	Transmitter transfer patch panel	A B G I

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

214 ULTRA HIGH FREQUENCY (UHF) NON-SECURE VOICE (TYPE U) SYSTEM (CONT'D)

214.2 PRINCIPLES OF OPERATION

214.2.1 Draw a diagram of this system and show signal flow. [refs. a thru c]

.2 How do the components work together to achieve the system's function? [refs. a thru c]

.3 What indications are received if the system is malfunctioning? [refs. a, c]

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(Signature and Date)

214.3 PARAMETERS/OPERATING LIMITS

For the items listed, answer the following questions: [refs. a thru c]

A. What is the normal operating value?
B. What are the allowable operating limits?
C. Where are the parameters sensed or monitored?
D. What is the physical location of the indicators?

		Questions
214.3.1	Receive audio levels	A B C D
.2	Transmitter output power level	A B C D
.3	Voltage standing-wave ratio	A B C D

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

214 ULTRA HIGH FREQUENCY (UHF) NON-SECURE VOICE (TYPE U) SYSTEM (CONT'D)

214.4 SYSTEM INTERFACE

214.4.1 How do the following influences affect the operation of this system: [refs. a, c]

a. Adverse atmospheric conditions
b. Loss of signal
c. Shipboard RFI
d. Loss of power

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(Signature and Date)

214.5 SAFETY PRECAUTIONS

214.5.1 What safety precautions must be observed when operating this system? [refs. d, e]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

215 ULTRA HIGH FREQUENCY (UHF) SECURE VOICE (TYPE R) SYSTEM

References:

[a] SPAWARINST 2700.1, Communications Quality Monitoring System, Ch. 4, Sec. 9
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat, Vol. II, Ch. C9
[e] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20

215.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What protection is provided by this component/component part?
G. What are the probable indications if this component fails?
H. What is the source of control signals?
I. What is the function of each position?

		Questions
215.1.1	UHF secure voice (type R) system	A C D F G H
.2	Antenna	A C D G H I
.3	Antenna coupler	A B D G H
.4	Transceiver	A B C D E G H I
.5	Receiver transfer switchboard (patch panel)	A B G
.6	Associated crypto devices	A B C D F G H I
.7	Remote switching unit (matrix)	A B C D E G H I
.8	SVPA	A B G
.9	Transmitter transfer patch panel	A B G I

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

215 ULTRA HIGH FREQUENCY (UHF) SECURE VOICE (TYPE R) SYSTEM (CONT'D)

215.2 PRINCIPLES OF OPERATION

215.2.1 Draw a diagram of this system and show signal flow. [refs. a thru c]

.2 How do the components work together to achieve the system's function? [refs. a thru c]

.3 What indications are received if the system is malfunctioning? [refs. a, c]

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(Signature and Date)

215.3 PARAMETERS/OPERATING LIMITS

For the items listed, answer the following questions: [refs. a thru c]

A. What is the normal operating value?
B. What are the allowable operating limits?
C. Where are the parameters sensed or monitored?
D. What is the physical location of the indicators?

		Questions
215.3.1	Receive audio levels	A B C D
.2	Transmitter output power level	A B C D
.3	Voltage standing-wave ratio	A B C D

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(Signature and Date)

215.4 SYSTEM INTERFACE

215.4.1 How do the following influences affect the operation of this system: [refs. a, c]

a. Adverse atmospheric conditions
b. Loss of signal
c. Shipboard RFI
d. Loss of power

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

215 ULTRA HIGH FREQUENCY (UHF) SECURE VOICE (TYPE R) SYSTEM (CONT'D)

215.5 SAFETY PRECAUTIONS

215.5.1 What safety precautions must be observed when operating this system? [refs. d, e]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

216 SATELLITE INFORMATION EXCHANGE SUBSYSTEM (IXS)

References:

[a] NTP 2, Section 2 (E), Navy Ultra High Frequency Satellite Communications
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20

216.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the probable indications if this component fails?
F. What is the source of control signals?
G. What is the function of each position?

216.1.1 IXS		**Questions** A B C G
a.	Transceiver	A B C D E F
b.	Interconnecting group	A B C D E F
c.	Cryptographic equipment	A B C D E F
d.	Red/black patch panel	A B C E F G
e.	NOW/NAVMACS	A B C E F
f.	Antenna	A B E F

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

216 SATELLITE INFORMATION EXCHANGE SUBSYSTEM (IXS) (CONT'D)

216.2 PRINCIPLES OF OPERATION

216.2.1 Draw a diagram of this system and show signal flow. [refs. b, c]

.2 How do the components work together to achieve the system's function? [refs. a thru c]

.3 What is the proper procedure to accomplish the following: [refs. b, c]

a. Activation
b. Deactivation
c. Frequency shifts
d. Loss of crypto
e. Loss of signal

.4 What indications are received if the system is malfunctioning? [refs. a, c]

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(Signature and Date)

216.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

216.4 SYSTEM INTERFACE

216.4.1 How do the following influences affect the operation of this system: [refs. a thru c]

a. Loss/fluctuation of power
b. Loss of air-conditioning
c. Loss of transmission media
d. Loss of frequency standard
e. Atmospheric conditions
f. Shipboard RFI/EMI

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(Signature and Date)

216.5 SAFETY PRECAUTIONS

216.5.1 What safety precautions must be observed when operating this system? [refs. d, e]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

217 SINGLE CHANNEL GROUND AND AIRBORNE RADIO SYSTEM (SINCGARS)

References:

[a] AN/SRC-54, Single Channel Ground and Airborne Radio System (SINCGARS), Orientation and Familiarization Handbook
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20

217.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the probable indications if this component fails?
F. What is the source of control signals?
G. What is the function of each position?

		Questions
217.1.1	SINCGARS	A B C D E
a.	SRCS	A B C E
b.	SIU	A B C D E
c.	Multicouplers	A B C D E F G
d.	Antennas	A B C E F
e.	Transceiver	A B C D E F G
f.	Crypto	A B C D E F G

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

217 SINGLE CHANNEL GROUND AND AIRBORNE RADIO SYSTEM (SINCGARS) (CONT'D)

217.2 PRINCIPLES OF OPERATION

217.2.1 Draw a block diagram of the system and show signal flow. [ref. b]

.2 How do the components work together to achieve the system's function? [ref. a]

.3 What indications are received if the system is malfunctioning? [refs. b, c]

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(Signature and Date)

217.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

217.4 SYSTEM INTERFACE

217.4.1 How do the following influences affect the operation of this system:
[refs. b, c]

a. Loss of air-conditioning
b. Loss/variation of power
c. Loss of master controller
d. Loss of portable radios

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(Signature and Date)

217.5 SAFETY PRECAUTIONS

217.5.1 What safety precautions must be observed when operating this system? [refs. d, e]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

218 AN/USC-38 EXTREMELY HIGH FREQUENCY (EHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEM

References:

[a] EE130-AG-HBK-030 VOL. 2 REVISION 01, USC-38 Satellite Communications-General, System Users Handbook
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20
[f] Shipboard RCSS
[g] NECC Manual
[h] Satellite Communications FOT Vol. 1
[i] Fireberd 6000A Reference Manual

218.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each:

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What are the probable indications if this component fails?

		Questions
218.1.1	EHF satellite communications [refs. b, c, f]	A B C D E F
.2	EHF communications equipment group	A B C D E F
	a. Legacy [ref. c]	A B C D E F
	b. FOT [ref. a]	A B C D E F
	c. NECC [ref. g, ch. 1]	A B C D E F
	d. TIP [ref. f]	A B C D E F
.	e Cryptographic device [ref. a]	A B C D E F

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

218 AN/USC-38 EXTREMELY HIGH FREQUENCY (EHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEM (CONT'D)

218.2 PRINCIPLES OF OPERATION

218.2.1 Draw a diagram of the system and show signal flow. [ref. b]

.2 How do the components work together to achieve the system's function? [refs. b, c]

.3 What indications are received if the system is malfunctioning? [ref. c]

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(Signature and Date)

218.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

218.4 SYSTEM INTERFACE

218.4.1 How do the following influences affect the operation of this system:

a. Unauthorized movement of the spot beam [ref. a, ch. 4]
b. Improper use of TRANSEC keys [ref. a, Figure 2]
c. Relation of allocated bandwidth to circuit availability [ref. a]
d. Loss of power [ref. h, ch. 7]
e. Loss of navigational data input [ref. h, ch. 7]
f. Atmospheric conditions [ref. a, ch. 3]

.2 How does this system interface with the following: [ref. a, ch. 5; ref. h, chs. 1-5, 1-6]

a. MILSTAR satellite interoperability with other MILSTAR satellites
b. MILSTAR satellite interoperability with UFO-E and FLTSAT satellites

.3 What are the FIREBERD settings to perform a BER test? [ref. i]

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(Signature and Date)

218.5 SAFETY PRECAUTIONS

218.5.1 What safety precautions must be observed when operating this system? [refs. d, e; ref. h, ch. 2]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

219 ADVANCED DIGITAL MULTIPLEXING SYSTEM (ADMS) ST-1000

References:

[a] ADMS ST-1000 System Administrator's Guide, Rev. 8
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] Fireberd 6000A Reference Manual
[f] Synchrony SNMS Operations
[g] HSGR TNX-1100 User/Admin

219.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [ref. a, ch. 3; refs. b, c, f]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the probable indications if this component fails?

		Questions
219.1.1	ST-1000	A B C D E
a.	Power switch	A B
b.	Alarm status	A B
c.	NCP-3	A B C D E
d.	SDM-8E V.11	A B C D E
e.	T1M-4 DS1	A B C D E
f.	LGM-2	A B C D E
g.	ASM-16C	A B C D E
h.	ASM-12	A B C D E
i.	LXM	A B C D E
j.	RXM	A B C D E

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

219 ADVANCED DIGITAL MULTIPLEXING SYSTEM (ADMS) ST-1000 (CONT'D)

			Questions
219.1.1	k.	SGM	A B C D E
	l.	CPS	A B C D E
	m.	SNMS	A B C D E

_____
(Signature and Date)

219.2 PRINCIPLES OF OPERATION

219.2.1 Draw a system diagram and show signal flow. [refs. b, c]

.2 How do the components work together to achieve the system's function? [refs. a thru c]

.3 What indications are received if the system is malfunctioning? [refs. a thru c]

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(Signature and Date)

219.3 PARAMETERS/OPERATING LIMITS

219.3.1 Explain the commands for following procedures: [ref. a, chs. 5, 6; refs. c, f]

a. Setup and connect data link
b. Setup and connect channel
c. Setup phone lines
d. Setup and connect high/low speed data circuits
e. Perform loop testing
f. Monitor and clear alarm queue
g. Define and monitor system parameters

.2 What are the settings for performing a BER test? [ref. e, ch. 4]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

219 ADVANCED DIGITAL MULTIPLEXING SYSTEM (ADMS) ST-1000 (CONT'D)

219.4 SYSTEM INTERFACE

219.4.1 How do the following influences affect the operation of this system: [refs. b, c]

a. Loss of signal
b. Loss/fluctuation of power

.2 How does ST-1000 interface with HSGR? [ref. g]

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(Signature and Date)

219.5 SAFETY PRECAUTIONS

219.5.1 What safety precautions must be observed when operating this system? [ref. d]

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

220 LINK/2+

References:

[a] TimePlex Group LINK/2+ Command Message Summary and DIP Switch Summary
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] Fireberd 6000A Reference Manual

220.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the probable indications if this component fails?

		Questions
220.1.1	LINK/2+	A B C D E
a.	Power switch	A B
b.	Alarm status	A B
c.	QSP.2	A B C D E
d.	QSP.12	A B C D E
e.	ILP	A B C D E
f.	QAM	A B C D E
g.	FXS/FXO	A B C D E
h.	QVM	A B C D E
i.	EVM	A B C D E
j.	ILC	A B C D E
k.	NCL	A B C D E
l.	VSM	A B C D E
m.	QSC	A B C D E
n.	DRE	A B C D E
o.	DRC	A B C D E

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

220 LINK/2+ (CONT'D)

220.2 PRINCIPLES OF OPERATION

220.2.1 How do the components work together to achieve the system's function? [refs. a thru c]

.2 What indications are received if the system is malfunctioning? [refs. a thru c]

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(Signature and Date)

220.3 PARAMETERS/OPERATING LIMITS

220.3.1 Explain the commands for following procedures: [refs. a, c]

a. Setup and connect data link
b. Setup and connect channel
c. Setup phone lines
d. Setup and connect high/low speed data circuits
e. Perform loop testing
f. Monitor and clear alarm queue
g. Define and monitor system parameters

.2 Explain the functions and limitations of the following: [ref. a]

a. QSP.12
b. QSP.2
c. NCL
d. ILC
e. Backplane
f. QAM
g. QSC
h. FXS/FXO
i. VSM.3
j. VSM.5

.3 What are the settings for performing a BER test? [ref. e, ch. 4]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

220 LINK/2+ (CONT'D)

220.4 SYSTEM INTERFACE

220.4.1 How do the following influences affect the operation of this system: [refs. b, c]

a. Loss of signal
b. Loss/fluctuation of power

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(Signature and Date)

220.5 SAFETY PRECAUTIONS

220.5.1 What safety precautions must be observed when operating this system? [ref. d]

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

221 AN/WSC-6 DEFENSE SATELLITE COMMUNICATIONS SYSTEM SET

References:

[a] NTP 2, Section 1 (E), Navy Super High Frequency Satellite Communications
[b] AN/WSC-6 Applicable Manufacturer's Technical Manual
[c] Combat System Operational Sequencing System (CSOSS)
[d] Local Standard Operating Procedures (SOP)
[e] Fireberd 6000A Reference Manual
[f] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat

221.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru d]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the probable indications if this component fails?
F. What is the source of control signals?

		Questions
221.1.1	AN/WSC-6 SHF SATCOM set	A B C D E F
.2	WSC-6(V) antenna group	A B E F
a.	antenna	A B E
b.	antenna control unit	A B E
c.	servo electric unit	A B E
d.	low noise amplifier	A B E
e.	high noise amplifier	A B E
f.	electronics cabinet	A B E
g.	cesium beam frequency	A B E
h.	prime power distribution unit	A B E

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

221 AN/WSC-6 DEFENSE SATELLITE COMMUNICATIONS SYSTEM SET (CONT'D)

		Questions
221.1.3	Modem group interface	A B E F
	a. CQM-248A modem	A B E
	b. SLM-3650 modem	A B E
	c. MD-1366A EBEM modem	A B E
	d. 70 MHz patch panel/SB-4126/WSC IF patch panel	A B E
	e. SB-183/SB-4124/WSC data patch panel	A B E

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(Signature and Date)

221.2 PRINCIPLES OF OPERATION

221.2.1 Draw a system diagram and show signal flow. [ref. c]

.2 How do the components work together to achieve the system's function? [ref. b]

.3 What indications are received if the system is malfunctioning? [ref. b]

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(Signature and Date)

221.3 PARAMETERS/OPERATING LIMITS

221.3.1 What are the settings for performing a BER test? [ref e, ch. 4]

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(Signature and Date)

221.4 SYSTEM INTERFACE

221.4.1 How do the following influences affect the operation of this system: [refs. b, d]

a. Loss/fluctuation of power
b. Loss of air-conditioning
c. Loss of ship's gyro
d. Atmospheric conditions

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

221 AN/WSC-6 DEFENSE SATELLITE COMMUNICATIONS SYSTEM SET (CONT'D)

221.4.2 How does this system interface with the following: [refs. a, d]

a. Secure voice operation
b. LDR data circuits
c. HDR data circuits

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(Signature and Date)

221.5 SAFETY PRECAUTIONS

221.5.1 What safety precautions must be observed when operating this system? [ref. f]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

222 AN/WSC-8 COMMERCIAL WIDEBAND SATELLITE PROGRAM SYSTEM

References:

[a] NTP 2, Section 1 (E), Navy Super High Frequency Satellite Communications
[b] AN/WSC-8 Applicable Manufacturer's Technical Manual
[c] Combat System Operational Sequencing System (CSOSS)
[d] Local Standard Operating Procedures (SOP)
[e] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[f] Fireberd 6000A Reference Manual

222.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru d]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the probable indications if this component fails?
F. What is the source of control signals?

		Questions
222.1.1	AN/WSC-8 SHF SATCOM set	A B C D E F
.2	WSC-8(V) antenna group	A B E F
a.	antenna	A B E
b.	antenna control unit	A B E
c.	servo electric unit	A B E
d.	low noise amplifier	A B E
e.	high noise amplifier	A B E
f.	electronics cabinet	A B E
g.	cesium beam frequency	A B E
h.	prime power distribution unit	A B E

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

222 AN/WSC-8 COMMERCIAL WIDEBAND SATELLITE PROGRAM SYSTEM (CONT'D)

Questions

222.1.3 Modem group interface — A B E F

a. CQM-248A modem — A B E
b. MD-1030B modem — A B E
c. MD-1366A EBEM modem — A B E
d. 70 MHz patch panel/SB-4126/WSC IF patch panel — A B E
e. SB-183/SB-4124/WSC data patch panel — A B E

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(Signature and Date)

222.2 PRINCIPLES OF OPERATION

222.2.1 Draw a system diagram and show signal flow. [ref. c]

.2 How do the components work together to achieve the system's function? [ref. b]

.3 What indications are received if the system is malfunctioning? [ref. b]

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(Signature and Date)

222.3 PARAMETERS/OPERATING LIMITS

222.3.1 What are the settings for performing a BER test? [ref. f, ch. 4]

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(Signature and Date)

222.4 SYSTEM INTERFACE

222.4.1 How do the following influences affect the operation of this system: [refs. b, d]

a. Loss/fluctuation of power
b. Loss of air-conditioning
c. Loss of ship's gyro
d. Atmospheric conditions

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

222 AN/WSC-8 COMMERCIAL WIDEBAND SATELLITE PROGRAM SYSTEM (CONT'D)

222.4.2 How does this system interface with the following: [refs. a, d]

a. Secure voice operation
b. LDR data circuits
c. HDR data circuits

_____
(Signature and Date)

222.5 SAFETY PRECAUTIONS

222.5.1 What safety precautions must be observed when operating this system? [ref. e]

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

223 AN/USR-10(V) GLOBAL BROADCAST SYSTEM (GBS)

References:

[a] NTP 2, Section 1 (E), Navy Super High Frequency Satellite Communications
[b] EE160-AH-MMC-010
[c] EE130-JQ-OMP-010/176-5
[d] Combat System Operational Sequencing System (CSOSS)
[e] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual
[f] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat

223.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [ref. a; ref. b, ch 3; ref. c, ch. 1]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the probable indications if this component fails?
F. What is the source of control signals?

		Questions
223.1.1	AN/USR-10(V) GBS SATCOM set	A B C D E F
.2	AN/USR-10 (V) antenna group	A B E F
a.	antenna	A B E
b.	antenna control unit	A B E
c.	servo electric unit	A B E
d.	low noise amplifier	A B E
e.	high noise amplifier	A B E
f.	electronics cabinet	A B E
g.	cesium beam frequency	A B E
h.	prime power distribution unit	A B E
i.	CS-100s Computer	A B E
j.	Ethernet Switch	A B E
k.	Media Converters	A B E

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

			Questions
223.1.2	l.	KG-250	A B E
	m.	IRD	A B E
	n.	DAS	A B E
	o.	RBM	A B E

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(Signature and Date)

223.2 PRINCIPLES OF OPERATION

223.2.1 Draw a system diagram and show signal flow. [ref. d]

.2 How do the components work together to achieve the system's function? [ref. b, chs. 3, 4; ref. c, ch. 1]

.3 What indications are received if the system is malfunctioning? [ref. c, ch 2]

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(Signature and Date)

223.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

223.4 SYSTEM INTERFACE

223.4.1 How do the following influences affect the operation of this system: [refs. b, d]

a. Loss/fluctuation of power
b. Loss of air-conditioning
c. Loss of ship's gyro
d. Atmospheric conditions

.2 How does this system interface with the following: [refs. a, d]

a. SIPRNET
b. NIPRNET
c. JCA Imagery
d. Video Broadcast

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

223 AN/USR-10(V) GLOBAL BROADCAST SYSTEM (GBS) (CONT'D)

223.5 SAFETY PRECAUTIONS

239.5.1 What safety precautions must be observed when operating this system? [refs. e, f]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

224 SHIPBOARD COMMUNICATIONS QUALITY MONITORING SYSTEM

References:

[a] SPAWARINST 2700.1, Communications Quality Monitoring System
[b] Applicable Quality Monitoring Technical Manual
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat

224.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [ref. a, ch. 3; refs. b, c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What are the probable indications if this component fails?
G. What is the source of control signals?

		Questions
224.1.1	Shipboard communications quality monitoring system	A B C D E F G
.2	Analyzer/generator	A B F
a.	PWR switch	A B
b.	PWR indicator lamp	A B
c.	Baud rate switch	A B
d.	Multiplier	A B
e.	Input select	A B
f.	POL switch	A B
g.	HI LVL SIG loop fuse	A B
h.	Percent distortion	A B
i.	Meter zero adjust	A B
j.	Spacing lamp	A B
k.	Signal	A B
l.	Meter reset switch	A B
m.	Transition select	A B
n.	Distortion select	A B

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

224 SHIPBOARD COMMUNICATIONS QUALITY MONITORING SYSTEM (CONT'D)

			Questions
224.1.2	o.	Code level switch	A B
	p.	Alarm lamp	A B
	q.	Marking lamp	A B
	r.	Stop length	A B
	s.	Function select	A B
	t.	Signal indicator lamp	A B
	u.	Step switch	A B
	v.	Type of distortion	A B
	w.	Distortion percentage, ten	A B
	x.	Distortion percentage, units	A B
	y.	CHAR 2 bit select	A B
	z.	CHAR 2 bit select	A B
.3	Display unit		A B F
	a.	Calibrator	A B
	b.	Line	A B
	c.	Scale	A B
	d.	Trace align	A B
	e.	Focus	A B
	f.	Astigmatism	A B
	g.	Intensity	A B
	h.	Find beam	A B
	i.	Position	A B
	j.	Fine	A B
	k.	Magnifier	A B
	l.	Phase/bandwidth	A B
	m.	Display	A B
	n.	ac/dc	A B
	o.	EXT input	A B
	p.	Input	A B
	q.	ac-GND-dc coupling	A B
	r.	Volts/DIV	A B
	s.	Vernier	A B
	t.	CAL	A B
	u.	Polarity	A B
	v.	Position	A B
	w.	dc BAL	A B
	x.	Vertical display	A B
	y.	UNCAL	A B
	z.	Sweep display	A B

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

224 SHIPBOARD COMMUNICATIONS QUALITY MONITORING SYSTEM (CONT'D)

			Questions
224.1.3	aa.	Time/DIV (main)	A B
	ab.	Vernier (main)	A B
	ac.	Trigger source (main)	A B
	ad.	EXT input (main)	A B
	ae.	Trigger coupling (main)	A B
	af.	Scope (main)	A B
	ag.	Trigger level (main)	A B
	ah.	Sweep mode (main)	A B
	ai.	Reset (main)	A B
	aj.	Delay (DIV)	A B
	ak.	DEL'D TRIG output	A B
	al.	Intens ratio	A B
.4	DC patch panel		A B F
.5	RF patch panel		A B F
.6	Tracking generator		A B F
	a.	Line on/off	A B
	b.	Manual scan	A B
	c.	Track adjust	A B
	d.	Level	A B
	e.	RF output	A B
	f.	Third LO input	A B
	g.	First LO input	A B
	h.	Scan output	A B
.7	Audio patching and termination panel		A B F
	a.	Patching jack	A B
	b.	Switch	A B
	c.	400 EL scale	A B
	d.	ac input	A B
	e.	REL REF adjust	A B
	f.	Range selector	A B
	g.	Line	A B
	h.	Line indicator	A B

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

224 SHIPBOARD COMMUNICATIONS QUALITY MONITORING SYSTEM (CONT'D)

			Questions
224.1.8	Signal generator		A B F
	a.	Meter function	A B
	b.	Scale	A B
	c.	Meter	A B
	d.	Output problem annunciator	A B
	e.	Counter mode	A B
	f.	Frequency MHz	A B
	g.	Time base vernier	A B
	h.	Time base adjust	A B
	i.	RF on/off	A B
	j.	RF output	A B
	k.	Output level	A B
	l.	Fine tune	A B
	m.	Frequency tune	A B
	n.	Range	A B
	o.	Counter input	A B
	p.	FM	A B
	q.	Peak deviation	A B
	r.	FM input/output	A B
	s.	Modulation frequency	A B
	t.	AM input/output	A B
	u.	Modulation	A B
	v.	Audio output level	A B
	w.	Line	A B
	x.	AM	A B
	y.	Mechanical meter zero	A B
.9	AM-3729 audio frequency amplifier		A B F
	a.	Pilot lamp	A B
	b.	Power switch	A B
	c.	Channel selector	A B
	d.	AF lever control	A B

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

224 SHIPBOARD COMMUNICATIONS QUALITY MONITORING SYSTEM (CONT'D)

		Questions A B F
224.1.10	Spectrum analyzer	
a.	Power switch (line on/line standby)	A B
b.	Cal output (screwdriver adjust)	A B
c.	Signal input (BNC)	A B
d.	Center frequency	A B
e.	Frequency span	A B
f.	Start frequency	A B
g.	Stop frequency	A B
h.	Reference level	A B
i.	Continuous/coarse/fine tune	A B
j.	Step	A B
k.	Instr present	A B
l.	RES BW	A B
m.	Video bandwidth	A B
n.	Sweep time	A B
o.	RF attenuation	A B
p.	Peak search	A B
q.	Marker center frequency	A B
r.	Differential markers	A B
s.	Marker zoom	A B
t.	Marker signal track	A B
u.	Frequency counter	A B
v.	Logarithmic scale	A B
w.	Linear scale	A B
x.	Threshold	A B
y.	Display	A B
z.	Center frequency step size	A B
aa.	Continuous sweep	A B
ab.	Single sweep	A B
ac.	Free run	A B
ad.	Line	A B
ae.	Ext	A B
af.	Video	A B
ag.	Level	A B
ah.	Full span instrument	A B
ai.	Recall	A B
aj.	Save	A B
ak.	Local OPS	A B
al.	Normal key function	A B
am.	Shift key function	A B

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

224 SHIPBOARD COMMUNICATIONS QUALITY MONITORING SYSTEM (CONT'D)

224.2 PRINCIPLES OF OPERATION

224.2.1 How do the components work together to achieve the system's function? [ref. a, ch. 3; ref. b, ch. 3; ref. c]

.2 What are the front panel control settings and sequence to activate and calibrate the following: [ref. a, ch. 3; ref. b, ch. 3; ref. c]

a. Distortion analyzer
b. Display unit
c. Signal generator
d. Spectrum analyzer

.3 What indications are received if the system is malfunctioning? [ref. b, ch. 5; ref. c]

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(Signature and Date)

224.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

224.4 SYSTEM INTERFACE – None to be discussed.

224.5 SAFETY PRECAUTIONS

224.5.1 What safety precautions must be observed when operating this system? [ref. d]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

225 NETWORKING SYSTEMS

References:

[a] Applicable Networking Manufacturer's Technical Manual (System specific)
[b] Local Standard Operating Procedures (SOP)
[c] Combat System Operational Sequencing System (CSOSS)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20

225.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What protection is provided by this component/component part?
G. What are the probable indications if this component fails?
H. What is the source of control signals?
I. What is the function of each position?

		Questions
225.1.1	LAN	A B C D G H
.2	WAN	A B C D G H
.3	MAN	A B C D G H
.4	Servers	A B C D G H
.5	Cable media	A G H
.6	Routers	A B C D E G H I
.7	Switches	A B C D E G H I
.8	HUB	A B C D E G H I
.9	Topology	A D H
.10	NIC	A B G H
.11	UPS	A B C F G

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

225 NETWORKING SYSTEMS (CONT'D)

225.2 PRINCIPLES OF OPERATION

225.2.1 How do the components work together to achieve the system's function? [refs. a thru c]

.2 What indications are received if the system is malfunctioning? [refs. a thru c]

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(Signature and Date)

225.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

225.4 SYSTEM INTERFACE

225.4.1 How do the following outside influences affect the operation of this system: [refs. a thru c]

a. Temperature and humidity
b. Fluctuation of power
c. Loss of air-conditioning

.2 How does this system interface with the following: [refs. a thru c]

a. Message systems
b. Tactical systems
c. Logistic systems
d. Personnel systems

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(Signature and Date)

225.5 SAFETY PRECAUTIONS

225.5.1 What safety precautions must be observed when operating this system? [refs. d, e]

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

226 INTEGRATED SHIPBOARD NETWORKING SYSTEM (ISNS)

References:

[a] ISNS System Administration Manual (SAG)
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20

226.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment in your command, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What protection is provided by this component/component part?
G. What are the probable indications if this component fails?
H. What is the source of control signals?
I. What is the function of each position?
J. What is the IP Address?
K. Who is the Point of Contact?

		Questions
226.1.1	Domain Controller	A B C D E F G J
.2	Exchange Server	A B C D E F G J
.3	File Server	A B C D E F G J
.4	Edge Switch	A B C D E F G J
.5	Router	A B C D E F G J
.6	MBT	A B C D E
.7	ABT	A B C D E
.8	Active Directory	A B F G
.9	ISA	A B D F G J
.10	DNS	A B D G J
.11	DHCP	A B D G J
.12	WINS	A B D G J

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

226 INTEGRATED SHIPBOARD NETWORKING SYSTEM (ISNS) (CONT'D)

		Questions
226.1.13	Antivirus	A B D F G
.14	Intranet Web server	A B D G J
.15	INMPRO	A B C D E F G H J
.16	Veritas Backup Exec	A
.17	Backbone Switch	A B C D E F G J
.18	UPS	A B C D E F G H I
.19	PDA	A B C G
.20	SOMS	A B G J K
.21	NSIPS	A B G J K
.22	MEDWEB/TELERAD	A B G J K
.23	MT	A B G J K
.24	TM	A B G J K
.25	JATDI	A B G J K
.26	OOMA	A B G J K
.27	UMIDS	A B G J K
.28	NAVY CASH	A B G J K
.29	SKED	A B G J K
.30	NIAPS	A B G J K
.31	FEDLOG	A B G J K
.32	AMSRR	A B G J K
.33	SAMS	A B G J K
.34	IDS	A B G J K

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(Signature and Date)

226.2 PRINCIPLES OF OPERATION

226.2.1 Draw a diagram of the system and show the signal flow. [refs. a thru c]

.2 How do the components work together to achieve the system's function? [refs. a thru c]

.3 What indications are received if the system is malfunctioning? [refs. a, c]

.4 How does Email leave the network? [ref. a]

.5 How does web browsing work? [ref. a]

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

226 INTEGRATED SHIPBOARD NETWORKING SYSTEM (ISNS) (CONT'D)

226.3 PARAMETERS/OPERATING LIMITS

For the items listed, answer the following questions: [refs. a thru c]

A. What is the normal operating value?
B. What are the allowable operating limits?
C. Where is the system monitored from?
D. How is the system monitor accessed?

		Questions`
226.3.1	Email outgoing queue	A B C D
.2	Email incoming queue	A B C D
.3	ISA Proxy Service status	A B C D
.4	Edge Switch/ Backbone temperatures	A B C D
.5	Free hard drive space	A B C D
.6	Exchange core services	A B C D
.7	Domain core services	A B C D
.8	Free Memory	A B C D
.9	Free Page file memory/Swap Space	A B C D

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(Signature and Date)

226.4 SYSTEM INTERFACE

226.4.1 How do the following influences affect the operation of this system: [refs. a thru c]

a. Loss/fluctuation of power
b. Loss of air-conditioning
c. Atmospheric conditions

_____
(Signature and Date)

226.5 SAFETY PRECAUTIONS

226.5.1 What safety precautions must be observed when operating this system? [refs. d, e]

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

227 NAVAL TACTICAL COMMAND SUPPORT SYSTEMS (NTCSS)

References:

[a] Naval Tactical Command Support System (NTCSS), Systems Administration Guide NSN: 0913-LP-103-7093
[b] Local Standard Operating Procedures (SOP)
[c] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[d] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20

227.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [ref. a, ch. 2, app. A; ref. b]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What protection is provided by this component/component part?
G. What are the probable indications if this component fails?
H. What is the source of control signals?
I. What are the interlocks?

227.1.1 NTCSS TAC 4		**Questions** A B C D G H I
a.	CPU	A B C G
b.	8 MM cartridge tape system	A B C G
c.	4 MM DAT drive	A B C G
d.	UPS	A B C E F G
e.	Video display	A B C G
f.	Keyboard with attached trackball	A B G
g.	Printers	A B C G
h.	CD ROM drive	A B G
i.	RAID device	A B G

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

227 NAVAL TACTICAL COMMAND SUPPORT SYSTEMS (NTCSS) (CONT'D)

227.2 PRINCIPLES OF OPERATION

227.2.1 How do the components work together to achieve the system's function? [ref. a, ch. 2; ref. b]

.2 What is the sequence of component involvement to accomplish: [ref. b]

a. Power on
b. Power off
c. Normal operations

.3 What indications are received if the system is malfunctioning? [ref. a, chs. 4, 5, app. B; ref. b]

_____
(Signature and Date)

227.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

227.4 SYSTEM INTERFACE

227.4.1 How do the following outside influences affect the operation of this system: [ref. b]

a. Temperature and humidity
b. Fluctuation in ship's electrical power
c. Loss of air-conditioning

.2 How does this system interface with the ship's LAN? [ref. b]

_____
(Signature and Date)

227.5 SAFETY PRECAUTIONS

227.5.1 What safety precautions must be observed when operating this system? [refs. c, d]

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

228 GLOBAL COMMAND AND CONTROL SYSTEM – MARITIME (GCCS-M)

References:

[a] Global Command and Control System – Maritime (GCCS-M) (Series Specific) Tech Manual
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20

228.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What protection is provided by this component/component part?
G. What are the probable indications if this component fails?
H. What is the source of control signals?
I. What is the function of each position?
J. What are the sub system components?

		Questions
228.1.1	HP 6000	A B C D E F G H J
.2	HP 712/715	A B C D E F G H
.3	DII/COE	A B C D E F G H
.4	UCP (JOTS1)	A B C D E F G H J
.5	ISDS (JOTS19)	A B C D E F G H J
.6	ITS (JOTS14)	A B C D E F G H J
.7	JMHS (JOTS12)	A B C D E F G H J
.8	UPS	A B C D E F G H
.9	TDBM	A B G
.10	NETPREC	A B G

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

228 GLOBAL COMMAND AND CONTROL SYSTEM – MARITIME (GCCS-M) (CONT'D)

		Questions
228.1.11	NAVMACS	A B
.12	TBMCS	A B C D E F G H I J

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(Signature and Date)

228.2 PRINCIPLES OF OPERATION

228.2.1 Draw a diagram of the system. [refs. a, b]

.2 How do the components work together to achieve the system's function? [refs. a thru c]

.3 What indications are received if the system is malfunctioning? [ref. a]

_____
(Signature and Date)

228.3 PARAMETERS/OPERATING LIMITS

For the items listed, answer the following questions: [refs. a thru c]

A. What is the normal operating value?
B. What are the allowable operating limits?
C. Where are the parameters sensed or monitored?
D. What is the physical location of the indicators?

		Questions
228.3.1	TDBM	A B C D
.2	SCSI address for primary hard drive	A B C D
.3	SCSI address for DAT Drive	A B C D
.4	Disk space of Quickload server	A B C D

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

228 GLOBAL COMMAND AND CONTROL SYSTEM – MARITIME (GCCS-M) (CONT'D)

228.4 SYSTEM INTERFACE

228.4.1 How do the following outside influences affect the operation of this system: [refs. a thru c]

a. Loss of NETPREC services
b. Loss of Track Database Input

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(Signature and Date)

228.5 SAFETY PRECAUTIONS

228.5.1 What safety precautions must be observed when operating this system? [refs. d, e]

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

229 COMBINED ENTERPRISE REGIONAL INFORMATION EXCHANGE SYSTEM (CENTRIXS)

References:

[a] CENTRIXS Tech Manual (Version specific)
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20

229.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What protection is provided by this component/component part?
G. What are the probable indications if this component fails?

			Questions
229.1.1	a.	CENTRIXS Server	A B C D E F G
	b.	Workstations	A B C F G

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(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

229 COMBINED ENTERPRISE REGIONAL INFORMATION EXCHANGE SYSTEM (CENTRIXS) (CONT'D)

229.2 PRINCIPLES OF OPERATION

229.2.1 Draw a diagram of the system and show the signal flow for the following: [refs. b, c]

a. Communication between multiple workstations
b. System router

.2 How do the components work together to achieve the system's function? [ref. a]

.3 What indications are received if the system is malfunctioning? [ref. a]

_____
(Signature and Date)

229.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

229.4 SYSTEM INTERFACE

229.4.1 How do the following outside influences affect the operation of this system: [ref. b]

a. Loss of power
b. Loss of ventilation

.2 How does this system interface with the following: [ref. b]

a. WINDOWS servers
b. PC workstations

_____
(Signature and Date)

229.5 SAFETY PRECAUTIONS

229.5.1 What safety precautions must be observed when operating this system? [refs. d, e]

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

230 DEFENSE MESSAGING DISSEMINATION SYSTEM (DMDS)

References:

[a] DMDS Users Guide (Version Specific)
[b] Local Standard Operating Procedures (SOP)
[c] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[d] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20

230.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [ref. a]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the probable indications if this component fails?
F. What is the source of control signals?
G. What is the function of each position?

		Questions
230.1.1	DMDS System	A B C D E F
.2	Database Manager	A E
.3	Profile	A B E
.4	Profile Set	A B E
.5	FORTEZZA Card	A B D F E G
.6	Key Words	A B G F
.7	System logs	A F E
.8	Mail Services Profile	A B E
.9	Input Path	A B E
.10	Address Book	A B E
.11	CRL publication/Sync	A B E

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

230 DEFENSE MESSAGING DISSEMINATION SYSTEM (DMDS) (CONT'D)

230.2 PRINCIPLES OF OPERATION

230.2.1 How do the components work together to achieve the system's function? [ref. a]

.2 What indications are received if the system is malfunctioning? [ref. a]

_____
(Signature and Date)

230.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

230.4 SYSTEM INTERFACE

230.4.1 How do the following outside influences affect the operation of this system: [refs. a, b]

a. Public folders
b. Mailbox
c. Distribution lists
d. Address Book
e. Network
f. DNS
g. CRL updates
h. NMCI
i. DISA

_____
(Signature and Date)

230.5 SAFETY PRECAUTIONS

230.5.1 What safety precautions must be observed when operating this system? [refs. c, d]

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

231 COLLABORATION AT SEA (CAS) SYSTEM

References:

[a] Collaboration at Sea (CAS) Tech Manual
[b] Combat System Operational Sequencing System (CSOSS)
[c] Local Standard Operating Procedures (SOP)
[d] OPNAVINST 5100.19E, Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat
[e] OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, Ch. 20
[f] NTP 4 (E), Naval Telecommunications Procedures, Naval Communications, Ch. 8
[g] 2006 SPAWAR. C4ISR CD SIMP, FNG, AND MISC INFO

231.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [refs. a thru c]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What are the probable indications if this component fails?

			Questions
231.1.1	a.	CAS server	A B C D E F
	b.	Workstations	A B C D E F

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

231 COLLABORATION AT SEA (CAS) SYSTEM (CONT'D)

231.2 PRINCIPLES OF OPERATION

231.2.1 Draw a diagram of the system and show the signal flow for the following: [ref. a, ch. 2; ref. b]

a. Communication between multiple workstations
b. System router

.2 How do the components work together to achieve the system's function? [ref. c]

.3 What indications are received if the system is malfunctioning? [ref. a, ch. 3]

_____
(Signature and Date)

231.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

231.4 SYSTEM INTERFACE

231.4.1 How do the following outside influences affect the operation of this system: [ref. b]

a. Loss of power
b. Loss of ventilation

.2 How does this system interface with the following: [ref. a, ch. 1]

a. WINDOWS servers
b. PC workstations

_____
(Signature and Date)

231.5 SAFETY PRECAUTIONS

231.5.1 What safety precautions must be observed when operating this system? [refs. d, e]

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

300 INTRODUCTION TO WATCHSTATIONS

300.1 INTRODUCTION

The Watchstation section of your PQS is where you get a chance to demonstrate to your Qualifier that you can put the knowledge you have gained in the previous sections to use. It allows you to practice the tasks required for your watchstation and to handle abnormal conditions and emergencies. Before starting your assigned tasks, you must complete the prerequisites that pertain to the performance of that particular task. Satisfactory completion of all prerequisites is required prior to achievement of final watchstation qualification.

300.2 FORMAT

Each watchstation in this section contains:

- A FINAL QUALIFICATION PAGE, which is used to obtain the required signatures for approval and recording of Final Qualification.

- PREREQUISITES, which are items that must be certified completed before you can begin qualification for a particular watchstation. Prerequisites may include schools, watchstation qualifications from other PQS books, and fundamentals, systems, or watchstation qualifications from this book. Prior to signing off each prerequisite line item, the Qualifier must verify completion from existing records. Record the date of actual completion, not the sign-off date.

- WATCHSTATION Performance, which is the practical factors portion of your qualification. The performance is broken down as follows:

    Tasks (routine operating tasks that are performed frequently)
    Infrequent Tasks
    Abnormal Conditions
    Emergencies
    Training Watches

If there are multiple watchstations, a QUALIFICATION PROGRESS SUMMARY will appear at the end of the Standard.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

300 INTRODUCTION TO WATCHSTATIONS (CONT'D)

300.3 OPERATING PROCEDURES

The PQS deliberately makes no attempt to specify the procedures to be used to complete a task or control or correct a casualty. The only proper sources of this information are the technical manuals, Engineering Operational Sequencing System (EOSS), Naval Air Training and Operating Procedures Standardization (NATOPS) or other policy-making documents prepared for a specific installation or a piece of equipment. Additionally, the level of accuracy required of a trainee may vary from school to school, ship to ship, and squadron to squadron based upon such factors as mission requirements. Thus, proficiency may be confirmed only through demonstrated performance at a level of competency sufficient to satisfy the Commanding Officer.

300.4 DISCUSSION ITEMS

Though actual performance of evolutions is always preferable to observation or discussion, some items listed in each watchstation may be too hazardous or time consuming to perform or simulate. Therefore, you may be required to discuss such items with your Qualifier.

300.5 NUMBERING

Each Final Qualification is assigned both a watchstation number and a NAVEDTRA Final Qualification number. The NAVEDTRA number is to be used for recording qualifications in service and training records.

300.6 HOW TO COMPLETE

After completing the required prerequisites applicable to a particular task, you may perform the task under the supervision of a qualified watchstander. If you satisfactorily perform the task and can explain each step, your Qualifier will sign you off for that task. After all line items have been completed, your Qualifier will verify Final Qualification by signing and dating the Final Qualification pages.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

301 PUBLICATIONS CLERK

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified PUBLICATIONS CLERK (NAVEDTRA 43355-F).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

301 PUBLICATIONS CLERK

Estimated completion time: 2 weeks

301.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

301.1.1 FUNDAMENTALS FROM THIS PQS:

101 Safety Precautions

Completed _____ 38% of Watchstation
(Qualifier and Date)

102 Security

Completed _____ 17% of Watchstation
(Qualifier and Date)

104 Publications

Completed _____ 2% of Watchstation
(Qualifier and Date)

105 Logs and Files

Completed _____ 3% of Watchstation
(Qualifier and Date)

106 Media
Completed _____ 3% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

301 PUBLICATIONS CLERK (CONT'D)

301.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. Satisfactorily perform this task.

		Questions
301.2.1	Enter and record updates/corrections to publications (2 times)	A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

.2	Accomplish page check against list of effective pages (2 times)	A B E

_____
(Signature and Date)

_____
(Signature and Date)

.3	Report discrepancies to proper authority (2 times)	A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

.4	Destroy residue (2 times)	A B E

_____
(Signature and Date)

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

301 PUBLICATIONS CLERK (CONT'D)

		Questions
301.2.5	Update watch-to-watch inventory	A B D E

_____
(Signature and Date)

.6	Report completion to NWPL custodian/clerk	A B C D E

_____
(Signature and Date)

.7	Download electronic publication	A B C D E

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 19% OF WATCHSTATION.

301.3 INFREQUENT TASKS – None to be discussed.

301.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What immediate action is required?
B. What are the probable causes?
C. What emergencies or malfunctions may occur if immediate action is not taken?
D. How does this condition affect other operations/equipment/watchstations?
E. What follow-up action is required?
F. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

		Questions
301.4.1	Failure to make timely publication corrections	A B C D E F

_____
(Signature and Date)

.2	Failure to make publication corrections in sequential order	A B C D E F

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

301 PUBLICATIONS CLERK (CONT'D)

Questions

301.4.3 Failure to page check against new list of effective pages A B C D E F

_____
(Signature and Date)

.4 Failure to maintain record changes A B C D E F

_____
(Signature and Date)

.5 Failure to denote authority for corrections A B C D E F

_____
(Signature and Date)

.6 Publication corrections not made with black ink A E F

_____
(Signature and Date)

.7 Failure to replace worn/mutilated publications A C D E F

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 12% OF WATCHSTATION.

301.5 EMERGENCIES – None to be discussed.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

301 PUBLICATIONS CLERK (CONT'D)

301.6 WATCHES

301.6.1 PERFORM DUTIES UNDER QUALIFIED SUPERVISION:

Publications Clerk (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 5% OF WATCHSTATION.

301.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

301.7.1 EXAMINATIONS Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

302 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 OPERATOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 OPERATOR (NAVEDTRA 43355-F).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

302 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 OPERATOR

Estimated completion time: 8 weeks

302.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

302.1.1 FUNDAMENTALS FROM THIS PQS:

101 Safety Precautions

Completed _____ 15% of Watchstation
(Qualifier and Date)

102 Security

Completed _____ 7% of Watchstation
(Qualifier and Date)

103 Power Distribution

Completed _____ 1% of Watchstation
(Qualifier and Date)

105 Logs and Files

Completed _____ 1% of Watchstation
(Qualifier and Date)

106 Media
Completed _____ 1% of Watchstation
(Qualifier and Date)

107 Message Text Format/Handling

Completed _____ 7% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

302 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 OPERATOR (CONT'D)

302.1.1 108 Minimize

Completed _____ 5% of Watchstation
(Qualifier and Date)

109 Broadcast

Completed _____ 1% of Watchstation
(Qualifier and Date)

110 Naval Modular Automated Communications System (NAVMACS) V-2

Completed _____ 4% of Watchstation
(Qualifier and Date)

.2 SYSTEMS FROM THIS PQS:

201 Naval Modular Automated Communications System (NAVMACS) V-2

Completed _____ 3% of Watchstation
(Qualifier and Date)

302.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What safety precautions must be observed?
E. What parameters/operating limits must be monitored?
F. Satisfactorily perform this task.

Questions

302.2.1 Energize equipment:

a. Set up AN/UYK-20(V) CPU A B C D E F

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

302 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 OPERATOR (CONT'D)

			Questions
302.2.1	b.	Set up CTTY	A C D E F
		_____ (Signature and Date)	
	c.	Set up printer	A C D E F
		_____ (Signature and Date)	
	d.	Set up RD-397(V)/U high speed paper tape reader/punch	A C D E F
		_____ (Signature and Date)	
	e.	Set up ON-143(V)/USQ interconnecting group	A C D E F
		_____ (Signature and Date)	
	f.	Set up AN/USH-26(V) CMTU or RD-396/U	A B C D F
		_____ (Signature and Date)	
.2		Load TTY tape in RD-397(V)/U high speed paper tape reader/punch	A B C D E F
		_____ (Signature and Date)	
.3		Prepare RD-397(V)/U for on-line operations	A B C E F
		_____ (Signature and Date)	
.4		Mount appropriate system program in the AN/USH-26(U) CMTU or in the RD-396/U	A B C F
		_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

302 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 OPERATOR (CONT'D)

		Questions
302.2.5	Construct a complete paper tape CGL with NGL included	A B F
	_____ (Signature and Date)	
.6	Construct a separate paper tape CGL or NGL	A B F
	_____ (Signature and Date)	
.7	Load NAVMACS V-2 Program	A B C F
	_____ (Signature and Date)	
.8	Duplicate program on magnetic tape	A B C F
	_____ (Signature and Date)	
.9	Initiate the NAVMACS V-2 system:	
	a. Specify the current system time	A B F
	_____ (Signature and Date)	
	b. Specify the SID	A B C F
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

302 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 OPERATOR (CONT'D)

Questions

302.2.10 Execute proper commands to parameter page 1:

a. Place a CUP A B C F

_____
(Signature and Date)

b. Place CDN A B C F

_____
(Signature and Date)

c. Specify CID A B C F

_____
(Signature and Date)

d. Specify CSN A B C F

_____
(Signature and Date)

e. Specify a broadcast circuit's traffic quality level (QRK) A B C F

_____
(Signature and Date)

f. Specify handling of broadcast rerun messages as first-run messages (RRM) A B C F

_____
(Signature and Date)

g. Specify whether broadcast or flash precedence rerun messages are to be printed A B C F

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

302 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 OPERATOR (CONT'D)

Questions

302.2.10 h. Specify whether broadcast non-addressed messages headings are to be printed A B C F

_____
(Signature and Date)

.11 Execute proper commands to parameter page 3:

a. Change SID A B C F

_____
(Signature and Date)

b. Change the NOB A B C F

_____
(Signature and Date)

c. Change ARQ limit A B C F

_____
(Signature and Date)

d. Specify the next OON A B C F

_____
(Signature and Date)

e. Activate the link (CUP LK) A B C F

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

302 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 OPERATOR (CONT'D)

Questions

302.2.12 Execute proper commands to parameter page 4:

a. Place paper tape punch up (EUP) A B C F

_____
(Signature and Date)

b. Place paper tape punch down (EDN) A B C F

_____
(Signature and Date)

c. Place tape punch in hold (HLD) A B C F

_____
(Signature and Date)

d. Change security classification for afloat GATEGUARD A B C F

_____
(Signature and Date)

e. Activate afloat GATEGUARD (EUP GG1) A B C F

_____
(Signature and Date)

.13 Execute proper commands to parameter pages:

a. Print individual system parameter pages A B F

_____
(Signature and Date)

b. Punch a copy of a system parameter page A B F

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

302 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 OPERATOR (CONT'D)

Questions

302.2.14 Execute proper commands for CGL:

a. Load CGL A B C F

_____
(Signature and Date)

b. Add addressee A B C F

_____
(Signature and Date)

c. Delete addressee A B C F

_____
(Signature and Date)

d. Load the paper tape CGL A B C F

_____
(Signature and Date)

e. Load the paper tape NGL A B C F

_____
(Signature and Date)

f. Print and punch a copy of the CGL A B C F

_____
(Signature and Date)

g. Clear the CGL A B C F

_____
(Signature and Date)

h. Reload punched CGL A B C F

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

302 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 OPERATOR (CONT'D)

Questions

302.2.15 Execute proper commands for LRL:

a. Compose a free-form LRL A B C F

_____
(Signature and Date)

b. Generate/reload a paper tape copy A B C F

_____
(Signature and Date)

c. Clear the LRL A B C F

_____
(Signature and Date)

.16 Execute proper commands to system reports:

a. Print a copy of the demand chronological report A B C F

_____
(Signature and Date)

b. Print a copy of the queue status report A B C F

_____
(Signature and Date)

.17 Execute proper commands for message retrieval:

a. Retrieve a message by SMN to a printer A B C F

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

302 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 OPERATOR (CONT'D)

Questions

302.2.18 Execute proper commands for outgoing circuit operation:

a. Compose and transmit an OTO message — A B C F

_____
(Signature and Date)

b. Cancel the transmission of all OTO messages presently in the transmit queue — A B C F

_____
(Signature and Date)

c. Change the link ARQ limit — A B C F

_____
(Signature and Date)

d. Place the link in EMCON status — A B C D F

_____
(Signature and Date)

e. Place the link in hold status — A B C F

_____
(Signature and Date)

.19 Execute proper commands for wanted message list:

a. Add three CIDs/CSNs — A B C F

_____
(Signature and Date)

b. Delete one CIS/CSN — A B C F

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

			Questions
302.2.19	c.	Print a copy of the WML	A B C D F
		_____ (Signature and Date)	
	d.	Clear all CIDs/CSNs	A B C F
		_____ (Signature and Date)	
.20		Execute proper commands to crash tape and load parameter pages into systems using crash tapes	A B C F
		_____ (Signature and Date)	
.21		Cancel the present paper tape punch activity	A B C F
		_____ (Signature and Date)	
.22		Hold closeouts (day)	A B C F
		_____ (Signature and Date)	
.23		Respond to system alerts	A B C D E F
		_____ (Signature and Date)	
.24		Respond to error notices	A B C D E F
		_____ (Signature and Date)	
.25		Perform system bypass for preventive maintenance	A B C D E F
		_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

302 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 OPERATOR (CONT'D)

		Questions
302.2.26	Perform system restart and recovery	A B C E F
	_____ (Signature and Date)	
.27	Load parameters page system data tape	A B C E F
	_____ (Signature and Date)	
.28	Stop the system	A B C E F
	_____ (Signature and Date)	

COMPLETED .2 AREA COMPRISES 45% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

302 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 OPERATOR (CONT'D)

302.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What safety precautions must be observed?
E. What parameters must be monitored?
F. How are the monitored parameters changed by this infrequent task?
G. What conditions require this infrequent task?
H. Satisfactorily perform or simulate this infrequent task.

		Questions
302.3.1	Operate under EMCON	A B C D E F G H
	_____ (Signature and Date)	
.2	Reset incoming/outgoing CSN and OTO numbers	A B C E F G H
	_____ (Signature and Date)	
.3	Add a message to the WML	A B C E F G H
	_____ (Signature and Date)	

COMPLETED .3 AREA COMPRISES 2% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

302 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 OPERATOR (CONT'D)

302.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. How does this condition affect other operations/equipment/watchstations?
F. What follow-up action is required?
G. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

		Questions
302.4.1	HSPTR/P failure	A B C D E F G
	_____ (Signature and Date)	
.2	Printer failure	A B C D E F G
	_____ (Signature and Date)	
.3	Level converter/patch panel failure	A B C D E F G
	_____ (Signature and Date)	
.4	Cassette or cartridge failure	A B C D E F G
	_____ (Signature and Date)	
.5	Message processing device failure	A B C D E F G
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

302 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 OPERATOR (CONT'D)

Questions

302.4.6 Broadcast failure A B C D E F G

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 4% OF WATCHSTATION.

302.5 EMERGENCIES – None to be discussed.

302.6 WATCHES

302.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Naval Modular Automated Communications System (NAVMACS) V-2 Operator (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 4% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

302 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 OPERATOR (CONT'D)

302.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

302.7.1 EXAMINATIONS Pass a written examination

_____

(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____

(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

303 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) OPERATOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) OPERATOR (NAVEDTRA 43355-F).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

303 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) OPERATOR

Estimated completion time: 8 weeks

303.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

303.1.1 SCHOOLS:

NAVMACS II System Administrator Course (A-101-0266) (RECOMMENDED)

Completed _____
(Qualifier and Date)

.2 FUNDAMENTALS FROM THIS PQS:

101 Safety Precautions

Completed _____ 17% of Watchstation
(Qualifier and Date)

102 Security

Completed _____ 7% of Watchstation
(Qualifier and Date)

103 Power Distribution

Completed _____ 2% of Watchstation
(Qualifier and Date)

105 Logs and Files

Completed _____ 2% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

303 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) OPERATOR (CONT'D)

303.1.2 106 Media

Completed _____ 2% of Watchstation
(Qualifier and Date)

107 Message Text Format/Handling

Completed _____ 7% of Watchstation
(Qualifier and Date)

108 Minimize

Completed _____ 6% of Watchstation
(Qualifier and Date)

109 Broadcast

Completed _____ 1% of Watchstation
(Qualifier and Date)

111 Naval Modular Automated Communications System II (NAVMACS II)

Completed _____ 4% of Watchstation
(Qualifier and Date)

.4 SYSTEMS FROM THIS PQS:

202 Naval Modular Automated Communications System (NAVMACS II)

Completed _____ 3% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

303 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) OPERATOR (CONT'D)

303.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. What parameters/operating limits must be monitored?
G. Satisfactorily perform this task.

		Questions
303.2.1	Energize equipment	A B E G
	_____ (Signature and Date)	
.2	Shift from system Alpha to system Bravo	A B C F G
	_____ (Signature and Date)	
.3	Load disk into VME chassis	A C F G
	_____ (Signature and Date)	
.4	Load tape into the TAC-3	A B G
	_____ (Signature and Date)	
.5	Load disk in the file server processing unit	A B G
	_____ (Signature and Date)	
.6	Compose message from disk	A B G
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

303 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) OPERATOR (CONT'D)

		Questions
303.2.7	Compose message on NAVMACS II	A B G
	_____ (Signature and Date)	
.8	Correct message from compose message window	A B G
	_____ (Signature and Date)	
.9	Cancel a composed message	A B G
	_____ (Signature and Date)	
.10	Release/transmit a composed message	A B C D G
	_____ (Signature and Date)	
.11	Prepare a readdressal message	A B C G
	_____ (Signature and Date)	
.12	Review applications menu	A B G
	_____ (Signature and Date)	
.13	Execute the proper commands for the COMM menu:	
	a. Review control panel	A B G
	_____ (Signature and Date)	
	b. Change status of circuit	A B C F G
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

303 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) OPERATOR (CONT'D)

			Questions
303.2.13	c.	View raw data of circuit	A B G
		_____ (Signature and Date)	
	d.	Set EMCON to a circuit	A B C E F G
		_____ (Signature and Date)	
	e.	Recycle associated crypto	A B C E F G
		_____ (Signature and Date)	
	f.	Create full period termination circuit	A B C D E F G
		_____ (Signature and Date)	
	g.	Create floppy queue	A B C D F G
		_____ (Signature and Date)	
	h.	Create local area broadcast	A B C D E F G
		_____ (Signature and Date)	
	i.	Set radio day	A B C F G
		_____ (Signature and Date)	
	j.	Compose/transmit/cancel an OTO message	A B C D F G
		_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

			Questions
303.2.13	k.	Transmit released message	A B C D G

_____
(Signature and Date)

	l.	Retransmit a released message	A B C D F G

_____
(Signature and Date)

.14 Generate the following reports and logs from the reports/logs menu:

a.	Message log	A B G

_____
(Signature and Date)

b.	OPINT log	A B G

_____
(Signature and Date)

c.	System log	A B G

_____
(Signature and Date)

d.	Section log	A B G

_____
(Signature and Date)

e.	Circuit summary report	A B G

_____
(Signature and Date)

f.	Duplicate message report	A B G

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

			Questions
303.2.14	g.	System configuration summary	A B G
		_____ (Signature and Date)	
	h.	Traffic summary report	A B G
		_____ (Signature and Date)	
	i.	Input status report for all circuits	A B G
		_____ (Signature and Date)	
	j.	Missing section report	A B G
		_____ (Signature and Date)	
.15	Demonstrate knowledge of the following system commands:		
	a.	Host shutdown	A B C E G
		_____ (Signature and Date)	
	b.	System reboot	A B C E G
		_____ (Signature and Date)	
	c.	System halt	A B C E G
		_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

303 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) OPERATOR (CONT'D)

		Questions
303.2.16	Distribute using case routing options	A B F G
	_____ (Signature and Date)	
.17.	Distribute using office routing options	A B F G
	_____ (Signature and Date)	
.18	Redistribute a message previously routed by using the office routing option	A B F G
	_____ (Signature and Date)	
.19	Distribute a sectional message	A B F G
	_____ (Signature and Date)	
.20	Respond to system alerts	A B E F G
	_____ (Signature and Date)	
.21	Display system status	A B F G
	_____ (Signature and Date)	
.22	Demonstrate the knowledge of the following:	
	a. WML	A B F G
	_____ (Signature and Date)	
	b. WDL	A B F G
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

303 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) OPERATOR (CONT'D)

			Questions
303.2.22	c.	Auto-print database	A B F G

_____
(Signature and Date)

	d.	Printer database	A B F G

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 36% OF WATCHSTATION.

303.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What parameters must be monitored?
F. How are the monitored parameters changed by this infrequent task?
G. What conditions require this infrequent task?
H. What safety precautions must be observed?
I. Satisfactorily perform or simulate this infrequent task.

		Questions
303.3.1	Operate under EMCON	A B C D E F G H I

_____
(Signature and Date)

.2	Manually process broadcast traffic	A B C D E F G I

_____
(Signature and Date)

.3	Prepare laser-jet printer for on-line operations	A B C D E F G I

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

		Questions
303.3.4	Delete message from system log	A B C D E F G

_____
(Signature and Date)

COMPLETED .3 AREA COMPRISES 3% OF WATCHSTATION.

303.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What emergencies or malfunctions may occur if immediate action is not taken?
F. How does this condition affect other operations/equipment/watchstations?
G. What follow-up action is required?
H. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

		Questions
303.4.1	Paper jam in printer	A B C D E F G H

_____
(Signature and Date)

.2	VME chassis overheating	A B C D E F G H

_____
(Signature and Date)

.3	TAC-3 computer overheating	A B C D E F G H

_____
(Signature and Date)

.4	Loss of ac power	A B C D E F G H

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

303 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) OPERATOR (CONT'D)

Questions

303.4.5 Failure of UPS A B C D E F G H

_____
(Signature and Date)

.6 Failure of TAC-3 computer A B C D E F G H

_____
(Signature and Date)

.7 Video display unit failure A B C D E F G H

_____
(Signature and Date)

.8 File server processor unit failure A B C D E F G H

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 6% OF WATCHSTATION.

303.5 EMERGENCIES – None to be discussed.

303.6 WATCHES

303.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Naval Modular Automated Communications System II (NAVMACS II) Operator (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 4% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

303 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) OPERATOR (CONT'D)

303.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

303.7.1 EXAMINATIONS Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

304 COMMUNICATIONS SECURITY (COMSEC) EQUIPMENT OPERATOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified COMMUNICATIONS SECURITY (COMSEC) EQUIPMENT OPERATOR (NAVEDTRA 43355-F).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

304 COMMUNICATIONS SECURITY (COMSEC) EQUIPMENT OPERATOR

Estimated completion time: 5 weeks

304.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

304.1.1 PQS QUALIFICATIONS

Electronic Key Material System (EKMS) (NAVEDTRA 43462-1A), 301 EKMS User

Completed _____
(Qualifier and Date)

.2 FUNDAMENTALS FROM THIS PQS:

101 Safety Precautions

Completed _____ 16% of Watchstation
(Qualifier and Date)

102 Security

Completed _____ 7% of Watchstation
(Qualifier and Date)

103 Power Distribution

Completed _____ 1% of Watchstation
(Qualifier and Date)

104 Publications

Completed _____ 1% of Watchstation
(Qualifier and Date)

105 Logs and Files

Completed _____ 1% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

304 COMMUNICATIONS SECURITY (COMSEC) EQUIPMENT OPERATOR (CONT'D)

304.1.2 106 Media

Completed _____ 1% of Watchstation
(Qualifier and Date)

109 Broadcast

Completed _____ 1% of Watchstation
(Qualifier and Date)

304.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. What parameters/operating limits must be monitored?
G. Satisfactorily perform this task.

		Questions
304.2.1	Operate KG-84 (3 times)	A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

304 COMMUNICATIONS SECURITY (COMSEC) EQUIPMENT OPERATOR (CONT'D)

Questions

304.2.2 Operate KG-83 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.3 Operate KG-75 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.4 Operate KY-58 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

304 COMMUNICATIONS SECURITY (COMSEC) EQUIPMENT OPERATOR (CONT'D)

		Questions
304.2.5	Operate KWR-46/KWT-46 (3 times)	A B C D E F G
	_____ (Signature and Date)	
	_____ (Signature and Date)	
	_____ (Signature and Date)	
.6	Operate KY-57 (3 times)	A B C D E F G
	_____ (Signature and Date)	
	_____ (Signature and Date)	
	_____ (Signature and Date)	
.7	Operate KYV-5 (3 times)	A B C D E F G
	_____ (Signature and Date)	
	_____ (Signature and Date)	
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

304 COMMUNICATIONS SECURITY (COMSEC) EQUIPMENT OPERATOR (CONT'D)

Questions

304.2.8 Operate KGR-96 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.9 Operate KY-68 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.10 Operate KYK-13 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

304 COMMUNICATIONS SECURITY (COMSEC) EQUIPMENT OPERATOR (CONT'D)

Questions

304.2.11 Operate KOI-18 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.12 Operate KYX-15 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.13 Operate KGV-11 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

304 COMMUNICATIONS SECURITY (COMSEC) EQUIPMENT OPERATOR (CONT'D)

Questions

304.2.14 Operate CYZ-10 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.15 Operate PYQ-10 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.16 Operate KG-40/KG-45 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

304 COMMUNICATIONS SECURITY (COMSEC) EQUIPMENT OPERATOR (CONT'D)

Questions

304.2.17 Operate KGV-8 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.18 Operate MD-1324 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.19 Operate KG-194 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

304 COMMUNICATIONS SECURITY (COMSEC) EQUIPMENT OPERATOR (CONT'D)

Questions

304.2.20 Operate KIV-7 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.21 Operate a KIV-19 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.22 Operate KG-175 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

304 COMMUNICATIONS SECURITY (COMSEC) EQUIPMENT OPERATOR (CONT'D)

		Questions
304.2.23	Operate KG-250 (3 times)	A B C D E F G
	_____ (Signature and Date)	
	_____ (Signature and Date)	
	_____ (Signature and Date)	
.24	Load DMR (3 times)	A B C D E F G
	_____ (Signature and Date)	
	_____ (Signature and Date)	
	_____ (Signature and Date)	
.25	Operate NES (3 times)	A B C D E F G
	_____ (Signature and Date)	
	_____ (Signature and Date)	
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

304 COMMUNICATIONS SECURITY (COMSEC) EQUIPMENT OPERATOR (CONT'D)

Questions

304.2.26 Operate KG-95 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.27 Operate KGV-229 (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.28 Operate the following STS terminals:

a. STU-III (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

304 COMMUNICATIONS SECURITY (COMSEC) EQUIPMENT OPERATOR (CONT'D)

Questions

304.2.28 b. SDD (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

c. MMT (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

d. STE (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

304 COMMUNICATIONS SECURITY (COMSEC) EQUIPMENT OPERATOR (CONT'D)

		Questions
304.2.29	Conduct OTAT/OTAR (3 times)	A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.30	Perform tempest checks	A B G

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 68% OF WATCHSTATION.

304.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What is the alarm set point?
F. What parameters must be monitored?
G. How are the monitored parameters changed by this infrequent task?
H. What conditions require this infrequent task?
I. Satisfactorily perform or simulate this infrequent task.

		Questions
304.3.1	Change crypto equipment settings to match circuit requirements	A B C D E F G H I

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

304 COMMUNICATIONS SECURITY (COMSEC) EQUIPMENT OPERATOR (CONT'D)

Questions

304.3.2 Update STU/STE (2 times) A B C D F G H I

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .3 AREA COMPRISES 2% OF WATCHSTATION.

304.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What emergencies or malfunctions may occur if immediate action is not taken?
F. How does this condition affect other operations/equipment/watchstations?
G. What follow-up action is required?
H. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

Questions

304.4.1 Loss/fluctuation of power A B C D E F G H

_____
(Signature and Date)

.2 Improperly labeled fill devices A B C D E F G H

_____
(Signature and Date)

.3 Restoral from loss of FACCON A B C D E F G H

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 2% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

304 COMMUNICATIONS SECURITY (COMSEC) EQUIPMENT OPERATOR (CONT'D)

304.5 EMERGENCIES – None to be discussed.

304.6 WATCHES – None.

304.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

304.7.1 EXAMINATIONS Pass a written examination

_____

(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____

(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

305 MESSAGE PROCESSING CENTER (MPC) SUPERVISOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified MESSAGE PROCESSING CENTER (MPC) SUPERVISOR (NAVEDTRA 43355-F).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

305 MESSAGE PROCESSING CENTER (MPC) WATCH SUPERVISOR

Estimated completion time: 8 weeks

305.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

305.1.1 WATCHSTATIONS FROM THIS PQS:

301 Publications Clerk

Completed _____
(Qualifier and Date)

302 Naval Modular Automated Communications System (NAVMACS) V-2 Operator

Completed _____
(Qualifier and Date)

303 Naval Modular Automated Communications System II (NAVMACS II) Operator

Completed _____
(Qualifier and Date)

304 Communications Security (COMSEC) Equipment Operator

Completed _____
(Qualifier and Date)

.2 SYSTEMS FROM THIS PQS:

201 Naval Modular Automated Communications System (NAVMACS) V-2

Completed _____ 6% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

305 MESSAGE PROCESSING CENTER (MPC) SUPERVISOR (CONT'D)

305.1.2 202 Naval Modular Automated Communications System II (NAVMACS II)

Completed _____ 6% of Watchstation
(Qualifier and Date)

207 Fleet Single-Channel Radio Teletypewriter Broadcast (Type M)

Completed _____ 8% of Watchstation
(Qualifier and Date)

208 Fleet Multi-Channel Radio Teletypewriter Broadcast (Type N)

Completed _____ 8% of Watchstation
(Qualifier and Date)

216 Satellite Information Exchange Subsystem (IXS)

Completed _____ 7% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

305 MESSAGE PROCESSING CENTER (MPC) SUPERVISOR (CONT'D)

305.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. What parameters/operating limits must be monitored?
G. Satisfactorily perform this task.

		Questions
305.2.1	Assign personnel to cover all watchstations (2 times)	A B C G

_____
(Signature and Date)

_____
(Signature and Date)

.2	Supervise watch-to-watch inventory (2 times)	A B C G

_____
(Signature and Date)

_____
(Signature and Date)

.3	Verify watch is familiar with current COMMPLAN, OPORDs, EMCON/HERO/RADHAZ restrictions, CIBs/CIAs, daily communications status messages/SOPs, and EAP (2 times)	A B C E G

_____
(Signature and Date)

_____
(Signature and Date)

.4	Conduct watchstation training with operators	A B C G

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

305 MESSAGE PROCESSING CENTER (MPC) SUPERVISOR (CONT'D)

		Questions
305.2.5	Initiate procedures to eliminate backlog	A B C D F G
	_____ (Signature and Date)	
.6	Verify processing of messages requiring special handling	A B C D F G
	_____ (Signature and Date)	
.7	Adhere to security policies	A B G
	_____ (Signature and Date)	
.8	Coordinate circuit restoration	A B C D E F G
	_____ (Signature and Date)	
.9	Maintain and review all applicable watch logs	A B G
	_____ (Signature and Date)	
.10	Maintain and review all ZBO logs	A B G
	_____ (Signature and Date)	
.11	Report abnormalities to appropriate authority	A B G
	_____ (Signature and Date)	
.12	Draft broadcast shifts/termination requests/ COMSPOTS/BSR/COMMSHIFTS (2 times)	A B G
	_____ (Signature and Date)	
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

305 MESSAGE PROCESSING CENTER (MPC) SUPERVISOR (CONT'D)

		Questions
305.2.13	Supervise during general quarters	A B C D E F G

_____
(Signature and Date)

.14	Supervise and evaluate shift operators	A B G

_____
(Signature and Date)

.15	Coordinate system maintenance (3 times)	A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.16	Supervise backups	A B G

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 35% OF WATCHSTATION.

305.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What conditions require this infrequent task?
F. Satisfactorily perform or simulate this infrequent task.

		Questions
305.3.1	Supervise use of alternate message delivery methods	A B C D E F

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

Questions

305.3.2 Supervise during minimize conditions A B C D E F

_____
(Signature and Date)

.3 Supervise during special circuit communications A B C D E F

_____
(Signature and Date)

.4 Supervise implementing emergency destruction A B C D E F

_____
(Signature and Date)

.5 Coordinate hardware/software upgrade/repair A B C D E F

_____
(Signature and Date)

COMPLETED .3 AREA COMPRISES 8% OF WATCHSTATION.

305.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What emergencies or malfunctions may occur if immediate action is not taken?
F. How does this condition affect other operations/equipment/watchstations?
G. What follow-up action is required?
H. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

Questions

305.4.1 Loss of classified material A B C D E F G H

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

305 MESSAGE PROCESSING CENTER (MPC) SUPERVISOR (CONT'D)

Questions

305.4.2 Loss of CMS material A B C D E F G H

_____
(Signature and Date)

.3 Improper watch-to-watch turnover A B C D E F G H

_____
(Signature and Date)

.4 Practices dangerous to security A B C D E F G H

_____
(Signature and Date)

.5 Unauthorized access to material/spaces A B C D E F G H

_____
(Signature and Date)

.6 Loss of air-conditioning A B C D E F G H

_____
(Signature and Date)

.7 Electrical power fluctuations A B C D E F G H

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 11% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

305 MESSAGE PROCESSING CENTER (MPC) SUPERVISOR (CONT'D)

305.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What other emergencies or malfunctions may occur if immediate action is not taken?
F. How does this emergency affect other operations/equipment/watchstations?
G What are the proper reporting procedures?
H. Satisfactorily perform or simulate the immediate action for this emergency.

		Questions
305.5.1	Personnel casualties	A B C D E F G H
	_____ (Signature and Date)	
.2	Equipment casualties	A B C D E F G H
	_____ (Signature and Date)	
.3	Fire	A B C D E F G H
	_____ (Signature and Date)	
.4	Flood	A B C D E F G H
	_____ (Signature and Date)	

COMPLETED .5 AREA COMPRISES 6% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

305 MESSAGE PROCESSING CENTER (MPC) SUPERVISOR (CONT'D)

305.6 WATCHES

305.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Information Watch Supervisor (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

Completed .6 area comprises 5% of watchstation.

305.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

305.7.1 EXAMINATIONS Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

306 TACTICAL TRANSMITTER/RECEIVER/TRANSCEIVER OPERATOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified TACTICAL TRANSMITTER/RECEIVER/TRANSCEIVER OPERATOR (NAVEDTRA 43355-F).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

306 TACTICAL TRANSMITTER/RECEIVER/TRANSCEIVER OPERATOR

Estimated completion time: 4 weeks

306.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

306.1.1 WATCHSTATIONS FROM THIS PQS:

304 Communications Security (COMSEC) Equipment Operator

Completed _____
(Qualifier and Date)

.2 FUNDAMENTALS FROM THIS PQS:

112 Antenna and Radio Wave Propagation

Completed _____ 7% of Watchstation
(Qualifier and Date)

113 Voice Operations

Completed _____ 5% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

306 TACTICAL TRANSMITTER/RECEIVER/TRANSCEIVER OPERATOR (CONT'D)

306.1.2 114 Basic Circuits

Completed _____ 3% of Watchstation
(Qualifier and Date)

115 Common Circuits

Completed _____ 1% of Watchstation
(Qualifier and Date)

116 Distress Circuits

Completed _____ 4% of Watchstation
(Qualifier and Date)

117 Portable Communications Equipment

Completed _____ 2% of Watchstation
(Qualifier and Date)

.3 SYSTEMS FROM THIS PQS:

203 SA-2112(V)/STQ Single Audio System (SAS) Red

Completed _____ 3% of Watchstation
(Qualifier and Date)

204 SA-2112A(V)/STQ Single Audio System (SAS) Black

Completed _____ 3% of Watchstation
(Qualifier and Date)

205 Automated Network Control Center (ANCC)

Completed _____ 3% of Watchstation
(Qualifier and Date)

206 AN/USQ-155(V)1 Tactical Variant Switch (TVS)

Completed _____ 3% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

306 TACTICAL TRANSMITTER/RECEIVER/TRANSCEIVER OPERATOR (CONT'D)

306.1.3 207 Fleet Single-Channel Radio Teletypewriter Broadcast (Type M)

Completed _____ 3% of Watchstation
(Qualifier and Date)

208 Fleet Single-Channel Radio Teletypewriter Broadcast (Type N)

Completed _____ 3% of Watchstation
(Qualifier and Date)

209 High Frequency (HF) Radio Teletypewriter Ship/Shore/Ship (Type D/G)

Completed _____ 3% of Watchstation
(Qualifier and Date)

210 Battle Force Email (BFEM)

Completed _____ 3% of Watchstation
(Qualifier and Date)

211 High Frequency (HF) Non-secure Voice (Type Y)

Completed _____ 3% of Watchstation
(Qualifier and Date)

212 High Frequency (HF) Secure Voice (Type S)

Completed _____ 3% of Watchstation
(Qualifier and Date)

213 Ultra High Frequency (UHF) Radio Teletypwriter (Type B/C)

Completed _____ 3% of Watchstation
(Qualifier and Date)

214 Ultra High Frequency (UHF) Non-secure Voice (Type U)

Completed _____ 3% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

306 TACTICAL TRANSMITTER/RECEIVER/TRANSCEIVER OPERATOR (CONT'D)

306.1.3 215 Ultra High Frequency (UHF) Secure Voice (Type R)

Completed _____ 3% of Watchstation
(Qualifier and Date)

217 Single Channel Ground and Airborne Radio System (SINCGARS)

Completed _____ 3% of Watchstation
(Qualifier and Date)

224 Shipboard Communications Quality Monitoring

Completed _____ 2% of Watchstation
(Qualifier and Date)

306.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. What parameters/operating limits must be monitored?
G. Satisfactorily perform this task.

		Questions
306.2.1	Energize equipment	A B C D E F G

_____
(Signature and Date)

.2	Tune equipment in auto and manual modes	A B C D E F G

_____
(Signature and Date)

.3	Patch and tune appropriate antenna coupler in automatic and manual modes	A B C D E F G

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

306 TACTICAL TRANSMITTER/RECEIVER/TRANSCEIVER OPERATOR (CONT'D)

		Questions
306.2.4	Patch required equipment	A B C D E F G
	_____ (Signature and Date)	
.5	Set up frequency Hop set	A B C D E F G
	_____ (Signature and Date)	
.6	Channelize transceiver/coupler	A B C D E F G
	_____ (Signature and Date)	
.7	Set equipment for remote preset operations	A B C D E F G
	_____ (Signature and Date)	
.8	De-energize equipment	A B C D E F G
	_____ (Signature and Date)	
.9	Verify proper system operation with end user	A B C D E F G
	_____ (Signature and Date)	
.10	Perform proper QC checks	A B C D E F G
	_____ (Signature and Date)	
.11	Verify chilled water system operation	A B C E F G
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

306 TACTICAL TRANSMITTER/RECEIVER/TRANSCEIVER OPERATOR (CONT'D)

306.2.12 Verify dry air system operation A B C E F G

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 6% OF WATCHSTATION.

306.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What parameters must be monitored?
F. How are the monitored parameters changed by this infrequent task?
G. What conditions require this infrequent task?
H. Satisfactorily perform or simulate this infrequent task.

Questions

306.3.1 Operate equipment under various EMCON/HERO/RADHAZ conditions A B C D E F G H

_____
(Signature and Date)

COMPLETED .3 AREA COMPRISES 1% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

306 TACTICAL TRANSMITTER/RECEIVER/TRANSCEIVER OPERATOR (CONT'D)

306.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What emergencies or malfunctions may occur if immediate action is not taken?
F. How does this condition affect other operations/equipment/watchstations?
G. What follow-up action is required?
H. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

		Questions
306.4.1	Loss of equipment internal/external frequency standards	A B C D E F G H
	_____ (Signature and Date)	
.2	Excessive equipment temperatures	A B C D E F G H
	_____ (Signature and Date)	
.3	Improper signal levels	A B C D E F G H
	_____ (Signature and Date)	
.4	Improper patching	A B C D E F G H
	_____ (Signature and Date)	
.5	Loss of primary external communications	A B C D E F G H
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

306 TACTICAL TRANSMITTER/RECEIVER/TRANSCEIVER OPERATOR (CONT'D)

Questions

306.4.6 Loss/fluctuations of electrical power A B C D E F G H

_____
(Signature and Date)

.7 Improper frequency selection/separation A B C D E F G H

_____
(Signature and Date)

.8 Loss of couplers/matrix A B C D E F G H

_____
(Signature and Date)

.9 Blown fuses A B C D E F G H

_____
(Signature and Date)

.10 Open RF patch cord A B C D E F G H

_____
(Signature and Date)

.11 Loss of RF signal A B C D E F G H

_____
(Signature and Date)

.12 Improper coupler selection A B C D E F G H

_____
(Signature and Date)

.13 Loss of chilled water/air-conditioning A B C D E F G H

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

306 TACTICAL TRANSMITTER/RECEIVER/TRANSCEIVER OPERATOR (CONT'D)

306.4.14 Loss of equipment A B C D E F G H

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 9% OF WATCHSTATION.

306.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What other emergencies or malfunctions may occur if immediate action is not taken?
F. How does this emergency affect other operations/equipment/watchstations?
G. Satisfactorily perform or simulate the immediate action for this emergency.

Questions

306.5.1 Fire A B C D E F G

_____
(Signature and Date)

.2 Flooding A B C D E F G

_____
(Signature and Date)

.3 Arcing in transmission system A B C D E F G

_____
(Signature and Date)

.4 Electrical shock A B C D E F G

_____
(Signature and Date)

COMPLETED .5 AREA COMPRISES 3% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

306 TACTICAL TRANSMITTER/RECEIVER/TRANSCEIVER OPERATOR (CONT'D)

306.6 WATCHES

306.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Tactical Transmitter/Receiver/Transceiver Operator (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 3% OF WATCHSTATION.

306.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

306.7.1 EXAMINATIONS Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

307 ULTRA HIGH FREQUENCY (UHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified ULTRA HIGH FREQUENCY (UHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (NAVEDTRA 43355-F).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

307 ULTRA HIGH FREQUENCY (UHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR

Estimated completion time: 4 weeks

307.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

307.1.1 WATCHSTATIONS FROM THIS PQS:

306 Tactical Transmitter/Receiver/Transceiver Operator

Completed _____
(Qualifier and Date)

.2 FUNDAMENTALS FROM THIS PQS:

118 Ultra High Frequency (UHF) Satellite Communications (SATCOM)

Completed _____ 2% of Watchstation
(Qualifier and Date)

.3 SYSTEMS FROM THIS PQS:

216 Satellite Information Exchange Subsystem (IXS)

Completed _____ 10% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

307 ULTRA HIGH FREQUENCY (UHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

307.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. What parameters/operating limits must be monitored?
G. Satisfactorily perform this task.

		Questions
307.2.1	Verify chilled water system operation	A B C E F G
	_____ (Signature and Date)	
.2	Verify dry air system operation	A B C E F G
	_____ (Signature and Date)	
.3	Energize equipment	A B C D E F G
	_____ (Signature and Date)	
.4	Verify navigation system input	A B C D F G
	_____ (Signature and Date)	
.5	Determine satellite to be used, channel, and frequency plan	A B C D E F G
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

307 ULTRA HIGH FREQUENCY (UHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

		Questions
307.2.6	Determine and adjust for proper azimuth/elevation	A B C D E F G
	_____ (Signature and Date)	
.7	Verify 400Hz Power	
	_____ (Signature and Date)	A B C D E F G
.8	Set up specified frequency/offset	A B C D E F G
	_____ (Signature and Date)	
.9	Load crypto equipment for 5kHz and/or 25kHz DAMA operations	A B C D E F G
	_____ (Signature and Date)	
.10	Set up transceiver/modem/RFS/RF/IF baseband patching or digital switch	A B C D E F G
	_____ (Signature and Date)	
.11	Set transceiver front panel controls for proper operation	A B C D F G
	_____ (Signature and Date)	
.12	Configure user interface GUI/HMI/RTI	A B C D E F G
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

307 ULTRA HIGH FREQUENCY (UHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

		Questions
307.2.13	Update terminal PRESET as specified in OPTASK COMMS plan for radio terminal and service parameters (i.e. home channel up/downlink freq; receiver off; DAMA guard addresses; destination address; configuration code; I/O port service assignment)	A B C D E F G
	_____ (Signature and Date)	
.14	Conduct power calibration and balancing	A B C D E F G
	_____ (Signature and Date)	
.15	Test key the transceiver on a non-DAMA test frequency	A B C D E F G
	_____ (Signature and Date)	
.16	Check and adjust the PA RF forward power level	A B C D E F G
	_____ (Signature and Date)	
.17	Check and adjust the antenna system's VSWR	A B C D E F G
	_____ (Signature and Date)	
.18	Verify proper setup for TSN	A B C D E F G
	_____ (Signature and Date)	
.19	Edit/Save an operational and backup channel TSN PRESET	A B C D E F G
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

		Questions
307.2.20	Perform TSN pre-launch steps to include the following: a. 25kHz DAMA link test b. 5kHz DAMA link quality threshold _____ (Signature and Date)	A B C D E F G
.21	Verify the ON-AIR TSN test _____ (Signature and Date)	A B C D E F G
.22	Operate the TD-1271 or MD-1324 (25kHz DAMA) in a single SATCOM WSC-3 configuration _____ (Signature and Date)	A B C D F G
.23	Operate the TD-1271 or MD-1324 (25kHz DAMA) in a dual SATCOM WSC-3 configuration _____ (Signature and Date)	A B C D F G
.24	Perform link test from the TD-1271 _____ (Signature and Date)	A B C D F G
.25	Bring up non-DAMA circuit _____ (Signature and Date)	A B C D F G
.26	Create/Update SATCOM WSC-3 PRESET channelization _____ (Signature and Date)	A B C D E F G

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

307 ULTRA HIGH FREQUENCY (UHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

		Questions
307.2.27	Demonstrate how to restore operations from a PRESET	A B C D E F G
	_____ (Signature and Date)	
.28	Set up DAMA 25kHz voice ANDVT circuit	A B C D E F G
	_____ (Signature and Date)	
.29	Set up non DAMA 5kHz voice ANDVT circuit	A B C D E F G
	_____ (Signature and Date)	
.30	Configure and verify proper system operation of MD-1324/5khz/25khz DAMA/DMR circuit	A B C D F G
	_____ (Signature and Date)	
.31	Assume CCOW functions	A B C D F G
	_____ (Signature and Date)	
.32	Verify proper system operation with end user	A B C D E F G
	_____ (Signature and Date)	

COMPLETED .2 AREA COMPRISES 41% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

307 ULTRA HIGH FREQUENCY (UHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

307.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What safety precautions must be observed?
D. What parameters must be monitored?
E. What conditions require this infrequent task?
F. Satisfactorily perform or simulate this infrequent task.

		Questions
307.3.1	Operate antennas in manual mode	A B C D E F

_____
(Signature and Date)

.2	Operate in receive only mode	A B C D E F

_____
(Signature and Date)

COMPLETED .3 AREA COMPRISES 5% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

307 ULTRA HIGH FREQUENCY (UHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

307.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What emergencies or malfunctions may occur if immediate action is not taken?
F. How does this condition affect other operations/equipment/watchstations?
G. What follow-up action is required?
H. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

		Questions
307.4.1	Loss of signal	A B C D E F G H
	_____ (Signature and Date)	
.2	Equipment malfunction	A B C D E F G H
	_____ (Signature and Date)	
.3	Use of insufficient/excessive transmitting power	A B C D E F G H
	_____ (Signature and Date)	
.4	Loss of chilled water	A B C D E F G H
	_____ (Signature and Date)	
.5	Loss of dry air	A B C D E F G H
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

Questions

307.4.6 Loss of navigation system input A B C D E F G H

_____
(Signature and Date)

.7 Loss of 400Hz

_____
(Signature and Date)

.8 Antennae blockage

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 15% OF WATCHSTATION.

307.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What other emergencies or malfunctions may occur if immediate action is not taken?
F. How does this emergency affect other operations/equipment/watchstations?
G. What follow-up action is required?
H. Satisfactorily perform or simulate the immediate action for this emergency.

Questions

307.5.1 Loss of equipment A B C D E F G H

_____
(Signature and Date)

.2 Loss of power A B C D E F G H

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

Questions

307.5.3 Fire A B C D E F G

_____
(Signature and Date)

.4 Flooding A B C D E F G

_____
(Signature and Date)

.5 Arcing in transmission system A B C D E F G

_____
(Signature and Date)

.6 Electrical shock A B C D E F G

_____
(Signature and Date)

COMPLETED .5 AREA COMPRISES 15% OF WATCHSTATION.

307.6 WATCHES

307.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Ultra High Frequency (UHF) Satellite Communications (SATCOM) Systems Operator (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 12% OF WATCHSTATION

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

307 ULTRA HIGH FREQUENCY (UHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

307.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

307.7.1 EXAMINATIONS Pass a written examination

_____

(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____

(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

308 EXTREMELY HIGH FREQUENCY (EHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified EXTREMELY HIGH FREQUENCY (EHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (NAVEDTRA 43355-F).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

308 EXTREMELY HIGH FREQUENCY (EHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR

Estimated completion time: 6 weeks

308.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

308.1.1 WATCHSTATIONS FROM THIS PQS:

307 Extremely High Frequency (EHF) Satellite Communications (SATCOM) Operator

Completed _____
(Qualifier and Date)

.2 FUNDAMENTALS FROM THIS PQS:

119 Extremely High Frequency (EHF) (AN/USC-38)

Completed _____ 17% of Watchstation
(Qualifier and Date)

.3 SYSTEMS FROM THIS PQS:

218 AN/USC-38 Extremely High Frequency (EHF) Satellite Communications (SATCOM)

Completed _____ 9% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

308 EXTREMELY HIGH FREQUENCY (EHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

308.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. What parameters/operating limits must be monitored?
G. Satisfactorily perform this task.

		Questions
308.2.1	Verify chilled water system operation	A B C E F G
	_____ (Signature and Date)	
.2	Verify dry air system operation	A B C E F G
	_____ (Signature and Date)	
.3	Energize equipment	A B C D E F G
	_____ (Signature and Date)	
.4	Verify navigation system input	A B C D F G
	_____ (Signature and Date)	
.5	Determine satellite to be used IAW ESP	A B C D E F G
	_____ (Signature and Date)	
.6	Determine and adjust for proper azimuth/elevation	A B C D E F G
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

308 EXTREMELY HIGH FREQUENCY (EHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

		Questions
308.2.7	Set up all associated LDR/MDR nets	A B C D E F G
	_____ (Signature and Date)	
.8	Verify all LDR/MDR menus	A C D E F G
	_____ (Signature and Date)	
.9	Set up NECC	A B C D E F G
	_____ (Signature and Date)	
.10	Set up TIP	A B C D E F G
	_____ (Signature and Date)	
.11	Verify proper system operation with end user	A B C D E F G
	_____ (Signature and Date)	
.12	Verify 400 Hz	A B C D E F G
	_____ (Signature and Date)	
.13	Review EHF Service Plan	A B C D E F G
	_____ (Signature and Date)	

COMPLETED .2 AREA COMPRISES 24% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

308 EXTREMELY HIGH FREQUENCY (EHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

308.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What safety precautions must be observed?
D. What parameters must be monitored?
E. What conditions require this infrequent task?
F. Satisfactorily perform or simulate this infrequent task.

Questions

308.3.1 Operate in receive only mode — A B C D E F

_____
(Signature and Date)

.2 Configure Beam Managed net — A B C D E F

_____
(Signature and Date)

.3 Activate Cross Band — A B C D E F

_____
(Signature and Date)

.4 Add/Remove users from the net — A B C D E F

_____
(Signature and Date)

.5 Load adaptation data — A B C D E F

_____
(Signature and Date)

.6 Load unique black and red keys — A B C D E F

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

308 EXTREMELY HIGH FREQUENCY (EHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

Questions

308.3.7 Load ephemeris data — A B C D E F

a. automatic
b. manual

_____
(Signature and Date)

.8 Demonstrate the proper procedure for breaking the chain — A B C D E F

_____
(Signature and Date)

COMPLETED .3 AREA COMPRISES 17% OF WATCHSTATION.

308.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What emergencies or malfunctions may occur if immediate action is not taken?
F. How does this condition affect other operations/equipment/watchstations?
G. What follow-up action is required?
H. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

Questions

308.4.1 Loss of signal — A B C D E F G H

_____
(Signature and Date)

.2 Equipment malfunction — A B C D E F G H

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

308 EXTREMELY HIGH FREQUENCY (EHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

Questions

308.4.3 Loss of chilled water A B C D E F G H

_____
(Signature and Date)

.4 Loss of dry air A B C D E F G H

_____
(Signature and Date)

.5 Loss of 400 Hz A B C D E F G H

_____
(Signature and Date)

.6 Loss of navigation system input A B C D E F G H

_____
(Signature and Date)

.7 Loss of ephemeris data A B C D E F G H

_____
(Signature and Date)

.8 Loss of system and terminal data A B C D E F G H

_____
(Signature and Date)

.9 Unauthorized movement of spot beam A B C D E F G H

_____
(Signature and Date)

.10 Bust of apportionment A B C D E F G

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 17% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

308 EXTREMELY HIGH FREQUENCY (EHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

308.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What other emergencies or malfunctions may occur if immediate action is not taken?
F. How does this emergency affect other operations/equipment/watchstations?
G. What follow-up action is required?
H. Satisfactorily perform or simulate the immediate action for this emergency.

		Questions
308.5.1	Loss of equipment	A B C D E F G H

_____
(Signature and Date)

.2	Loss of power	A B C D E F G H

_____
(Signature and Date)

COMPLETED .5 AREA COMPRISES 5% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

308 EXTREMELY HIGH FREQUENCY (EHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

308.6 WATCHES

308.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Extremely High Frequency (EHF) Satellite Communications (SATCOM) Systems Operator (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 11% OF WATCHSTATION.

308.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

308.7.1 EXAMINATIONS Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

309 SUPER HIGH FREQUENCY (SHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified SUPER HIGH FREQUENCY (SHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR(NAVEDTRA 43355-F).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

309 SUPER HIGH FREQUENCY (SHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR

Estimated completion time: 8 weeks

309.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

309.1.1 WATCHSTATIONS FROM THIS PQS:

308 Extremely High Frequency (EHF) Satellite Communications (SATCOM) Operator

Completed _____
(Qualifier and Date)

.2 FUNDAMENTALS FROM THIS PQS:

120 Super High Frequency (SHF) Satellite Communications (SATCOM)

Completed _____ 9% of Watchstation
(Qualifier and Date)

.3 SYSTEMS FROM THIS PQS:

219 Advanced Digital Multiplexing System (ADMS) ST-1000

Completed _____ 9% of Watchstation
(Qualifier and Date)

220 Link/2+

Completed_____ 9% of Watchstation
(Qualifier and Date)

221 AN/WSC-6 Defense Satellite Communications System Set

Completed_____ 7% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

309 SUPER HIGH FREQUENCY (SHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

309.1.3 222 AN/WSC-8 Commercial Wideband Satellite Program

Completed_____ 7% of Watchstation
(Qualifier and Date)

223 AN/USR-10(V) Global Broadcast System (GBS)

Completed_____ 7% of Watchstation
(Qualifier and Date)

309.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. What parameters/operating limits must be monitored?
G. Satisfactorily perform this task.

Questions

309.2.1 Verify chilled water system operation A B C E F G

_____
(Signature and Date)

.2 Verify dry air system operation A B C E F G

_____
(Signature and Date)

.3 Verify 400 Hz A B C D E F G

_____
(Signature and Date)

.4 Energize equipment A B C D E F G

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

		Questions
309.2.5	Verify navigation system input	A B C D F G
	_____ (Signature and Date)	
.6	Determine satellite to be used, channel, and frequency plan	A B C D E F G
	_____ (Signature and Date)	
.7	Determine and adjust for proper azimuth/elevation	A B C D E F G
	_____ (Signature and Date)	
.8	Set up specified frequency/offset	A B C D E F G
	_____ (Signature and Date)	
.9	Set transceiver front panel controls for proper operation	A B C D F G
	_____ (Signature and Date)	
.10	Conduct power calibration and balancing	A B C D E F G
	_____ (Signature and Date)	
.11	Verify proper setup for AN/FCC-100	A B C D E F G
	_____ (Signature and Date)	
.12	Verify proper setup for SHF modem	A B C D E F G
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

309 SUPER HIGH FREQUENCY (SHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

Questions

309.2.13 Verify proper system operation with terminating station — A B C D E F G

_____
(Signature and Date)

.14 Perform the following BER tests on RF path and channels: — A B C D E F G

a. Local loop
b. Remote loop
c. End to-end

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 24% OF WATCHSTATION.

309.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What safety precautions must be observed?
D. What parameters must be monitored?
E. What conditions require this infrequent task?
F. Satisfactorily perform or simulate this infrequent task.

Questions

309.3.1 Operate in receive only mode — A B C D E F

_____
(Signature and Date)

COMPLETED .3 AREA COMPRISES 2% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

309 SUPER HIGH FREQUENCY (SHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

309.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What emergencies or malfunctions may occur if immediate action is not taken?
F. How does this condition affect other operations/equipment/watchstations?
G. What follow-up action is required?
H. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

		Questions
309.4.1	Loss of signal	A B C D E F G H
	_____ (Signature and Date)	
.2	Equipment malfunction	A B C D E F G H
	_____ (Signature and Date)	
.3	Insufficient/excessive transmitting power	A B C D E F G H
	_____ (Signature and Date)	
.4	Loss of chilled water	A B C D E F G H
	_____ (Signature and Date)	
.5	Loss of dry air	A B C D E F G H
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

309 SUPER HIGH FREQUENCY (SHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

Questions

309.4.6 Loss of navigation system input A B C D E F G H

_____
(Signature and Date)

.7 Loss of 400 Hz A B C D E F G H

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 12% OF WATCHSTATION.

309.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What other emergencies or malfunctions may occur if immediate action is not taken?
F. How does this emergency affect other operations/equipment/watchstations?
G. What follow-up action is required?
H. Satisfactorily perform or simulate the immediate action for this emergency.

Questions

309.5.1 Loss of equipment A B C D E F G H

_____
(Signature and Date)

.2 Loss of power A B C D E F G H

_____
(Signature and Date)

COMPLETED .5 AREA COMPRISES 4% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

309 SUPER HIGH FREQUENCY (SHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR (CONT'D)

309.6 WATCHES

309.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Super High Frequency (SHF) Satellite Communications (SATCOM) Systems Operator (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 10% OF WATCHSTATION.

309.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

309.7.1 EXAMINATIONS Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

310 TRANSMISSION SYSTEM TECHNICIAN (TST) SUPERVISOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified TRANSMISSION SYSTEM TECHNICIAN (TST) SUPERVISOR (NAVEDTRA 43355-F).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

310 TRANSMISSION SYSTEM TECHNICIAN (TST) SUPERVISOR

Estimated completion time: 8 weeks

310.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

310.1.1 SCHOOLS:

Journeyman Communications Course (A-260-0057) (RECOMMENDED)

Completed _____
(Qualifier and Date)

.2 PQS QUALIFICATIONS:

Automated Digital Network System (ADNS) (NAVEDTRA 43356)

300 Command Applicable Section

Completed _____
(Qualifier and Date)

.3 WATCHSTATIONS FROM THIS PQS:

301 Publications Clerk

Completed _____
(Qualifier and Date)

304 Communications Security (COMSEC) Equipment Operator

Completed _____
(Qualifier and Date)

306 Tactical Transmitter/Receiver/Transceiver Operator

Completed _____
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

310.1.3 307 Ultra High Frequency (UHF) Satellite Communications (SATCOM) Systems Operator

Completed _____
(Qualifier and Date)

308 Extremely High Frequency (EHF) Satellite Communications (SATCOM) Systems Operator

Completed _____
(Qualifier and Date)

309 Super High Frequency (SHF) Satellite Communications (SATCOM) Systems Operator

Completed _____
(Qualifier and Date)

.4 FUNDAMENTALS FROM THIS PQS:

121 Emissions Control (EMCON)

Completed _____ 2% of Watchstation
(Qualifier and Date)

122 Operations Orders (OPORD)

Completed _____ 2% of Watchstation
(Qualifier and Date)

.5 SYSTEMS FROM THIS PQS:

203 SA-2212(V)/STQ Single Audio system (SAS) (Red)

Completed _____ 3% of Watchstation
(Qualifier and Date)

204 SA-2212A(V)/STQ Single Audio system (SAS) (Black)

Completed _____ 3% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

310 TRANSMISSION SYSTEM TECHNICIAN (TST) SUPERVISOR (CONT'D)

310.1.5 205 Automated Network Control Center (ANCC)

Completed _____ 3% of Watchstation
(Qualifier and Date)

206 AN/USQ-155(V)1 Tactical Variant Switch (TVS)

Completed _____ 3% of Watchstation
(Qualifier and Date)

207 Fleet Single-Channel Radio Teletypewriter Broadcast (Type M)

Completed _____ 4% of Watchstation
(Qualifier and Date)

208 Fleet Multi-Channel Radio Teletypewriter Broadcast (Type N)

Completed _____ 4% of Watchstation
(Qualifier and Date)

209 High Frequency (HF) Radio Teletypewriter Ship/Shore/Ship (Type D/G)

Completed _____ 4% of Watchstation
(Qualifier and Date)

210 Battle Force Email (BFEM)

Completed _____ 3% of Watchstation
(Qualifier and Date)

211 High Frequency (HF) Non-secure Voice (Type Y)

Completed _____ 4% of Watchstation
(Qualifier and Date)

212 High Frequency (HF) Secure Voice (Type S)

Completed _____ 4% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

310.1.5 213 Ultra High Frequency (UHF) Radio Teletypewriter (Type B/C)

Completed _____ 4% of Watchstation
(Qualifier and Date)

214 Ultra High Frequency (UHF) Non-secure Voice (Type U)

Completed _____ 4% of Watchstation
(Qualifier and Date)

215 Ultra High Frequency (UHF) Secure Voice (Type R)

Completed _____ 4% of Watchstation
(Qualifier and Date)

216 Satellite Information Exchange Subsystem (IXS)

Completed _____ 3% of Watchstation
(Qualifier and Date)

217 Single Channel Ground and Airborne Radio System (SINCGARS)

Completed _____ 3% of Watchstation
(Qualifier and Date)

218 AN/USC-38 Extremely High Frequency (EHF) Satellite Communications (SATCOM)

Completed _____ 3% of Watchstation
(Qualifier and Date)

219 Advanced Digital Multiplexing System (ADMS) ST-1000

Completed _____ 4% of Watchstation
(Qualifier and Date)

220 Link/2+

Completed _____ 4% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

310.1.5 221 AN/WSC-6 Defense Satellite Communications System Set

Completed _____ 3% of Watchstation
(Qualifier and Date)

222 AN/WSC-8 Commercial Wideband Satellite Program

Completed _____ 3% of Watchstation
(Qualifier and Date)

223 AN/USR-10(V) Global Broadcast System (GBS)

Completed _____ 3% of Watchstation
(Qualifier and Date)

224 Shipboard Communications Quality Monitoring

Completed _____ 2% of Watchstation
(Qualifier and Date)

310.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. Satisfactorily perform this task.

		Questions
310.2.1	Verify and maintain status boards	A B F

_____
(Signature and Date)

.2	Construct and implement COMM plan	A B F

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

		Questions
310.2.3	Conduct watch-to-watch inventory	A B F
	_____ (Signature and Date)	
.4	Conduct watch-to-watch CMS material/equipment inventory	A B F
	_____ (Signature and Date)	
.5	Ensure daily crypto restarts/OTAT/OTAR/destruction	A B C D E F
	_____ (Signature and Date)	
.6	Make appropriate log entries	A B F
	_____ (Signature and Date)	
.7	Inform CWO of pertinent information/problems	A B F
	_____ (Signature and Date)	
.8	Verify watch team is familiar with COMMPLAN, OPORDS, EMCON/HERO/RADHAZ/RIVERCITY restrictions, CIBs/SOPs, SAA, ESP, and emergency destruction plan	A B C E F
	_____ (Signature and Date)	
.9	Draft COMSPOT/SAR/AAR/GAR	A B C D E F
	_____ (Signature and Date)	
.10	Conduct training for operators	A B C D E F
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

Questions

310.2.11 Instruct and monitor physical and transmission security of technical control watchstations — A B C D E F

_____
(Signature and Date)

.12 Verify quality control monitoring — A B F

_____
(Signature and Date)

.13 Supervise allocation of communications equipment — A B E F

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 9% OF WATCHSTATION.

310.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. What parameters must be monitored?
G. What conditions require this infrequent task?
H. Satisfactorily perform or simulate this infrequent task.

Questions

310.3.1 Supervise Guerrilla procedures — A B C D E F G H

_____
(Signature and Date)

.2 Supervise portable communications equipment setup — A B C D E F G H

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

310 TRANSMISSION SYSTEM TECHNICIAN (TST) SUPERVISOR (CONT'D)

Questions

310.3.3 Monitor proper us of GINGERBREAD procedures A B C D E F G H

_____
(Signature and Date)

.4 Monitor proper use of BEADWINDOW procedures A B C D E F G H

_____
(Signature and Date)

.5 Supervise OPAREA cutover A B C D E F G H

_____
(Signature and Date)

.6 Supervise set up of pier connectivity A B C D E F G H

_____
(Signature and Date)

.7 Supervise/Conduct inport/underway pre-checks A B C D E F G H

_____
(Signature and Date)

COMPLETED .3 AREA COMPRISES 4% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

310.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What emergencies or malfunctions may occur if immediate action is not taken?
F. How does this condition affect other operations/equipment/watchstations?
G. What follow-up action is required?
H. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

		Questions
310.4.1	Adverse atmospheric conditions	A B C D E F G H
	_____ (Signature and Date)	
.2	Loss/fluctuations of electrical power	A B C D E F G H
	_____ (Signature and Date)	
.3	Loss of any tactical circuit	A B C D E F G H
	_____ (Signature and Date)	
.4	Loss of CMS material	A B C D E F G H
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

		Questions
310.4.5	Loss of frequency standard	A B C D E F G H

_____
(Signature and Date)

.6	Loss of antenna system	A B C D E F G H

_____
(Signature and Date)

.7	Loss of chilled water/air-conditioning	A B C D E F G H

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 4% OF WATCHSTATION.

310.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What other emergencies or malfunctions may occur if immediate action is not taken?
D. How does this emergency affect other operations/equipment/watchstations?
E. Satisfactorily perform or simulate the immediate action for this emergency.

		Questions
310.5.1	Fire	A B C D E

_____
(Signature and Date)

.2	Flooding	A B C D E

_____
(Signature and Date)

.3	Arcing in equipment	A B C D E

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

Questions

310.5.4 Electrical shock A B C D E

_____

(Signature and Date)

COMPLETED .5 AREA COMPRISES 2% OF WATCHSTATION.

310.6 WATCHES

310.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Transmission System Technician (TST) Supervisor (3 times)

_____

(Signature and Date)

_____

(Signature and Date)

_____

(Signature and Date)

COMPLETED .6 AREA COMPRISES 2% OF WATCHSTATION.

310.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

310.7.1 EXAMINATIONS Pass a written examination

_____

(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____

(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

311 MEDIA CLERK

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified MEDIA CLERK (NAVEDTRA 43355-F).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

311 MEDIA CLERK

Estimated completion time: 4 weeks

311.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

311.1.1 FUNDAMENTALS FROM THIS PQS:

101 Security

Completed _____ 7% of Watchstation
(Qualifier and Date)

102 Publications

Completed _____ 3% of Watchstation
(Qualifier and Date)

105 Logs and Files

Completed _____ 7% of Watchstation
(Qualifier and Date)

106 Media

Completed _____ 7% of Watchstation
(Qualifier and Date)

123 Hardware and Software

Completed _____ 3% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

311 MEDIA CLERK (CONT'D)

311.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What safety precautions must be observed?
E. Satisfactorily perform this task.

		Questions
311.2.1	Ensure accuracy of input and output media labels	A B E
	_____ (Signature and Date)	
.2	Ensure proper storage of media	A B E
	_____ (Signature and Date)	
.3	Clean and maintain media devices	A B D E
	_____ (Signature and Date)	
.4	Interpret and respond to errors	A B E
	_____ (Signature and Date)	
.5	Perform virus scan on incoming media	A B E
	_____ (Signature and Date)	
.6	Declassify media	A B D E
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

311 MEDIA CLERK (CONT'D)

		Questions
311.2.7	Format media	A B E
	_____ (Signature and Date)	
.8	Serialize media	A B E
	_____ (Signature and Date)	
.9	Maintain software user documentation	A B E
	_____ (Signature and Date)	
.10	Conduct physical inventory of software media	A B E
	_____ (Signature and Date)	
.11	Maintain software license agreement	A B E
	_____ (Signature and Date)	
.12	Maintain off-site storage of data files	A B C E
	_____ (Signature and Date)	
.13	Conduct physical inventory of magnetic media library	A B C E
	_____ (Signature and Date)	

COMPLETED .2 AREA COMPRISES 42% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

311 MEDIA CLERK (CONT'D)

311.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What conditions require this infrequent task?
F. Satisfactorily perform or simulate this infrequent task.

		Questions
311.3.1	Destroy media	A B C D E F

_____
(Signature and Date)

.2	Perform virus debug procedures	A B C E F

_____
(Signature and Date)

Completed .3 area comprises 7% of watchstation.

311.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What immediate action is required?
B. What operating limitations are imposed?
C. What emergencies or malfunctions may occur if immediate action is not taken?
D. How does this condition affect other operations/equipment/watchstations?
E. What follow-up action is required?
F. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

		Questions
311.4.1	Improperly labeled media	A B C D E F

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

311 MEDIA CLERK (CONT'D)

Questions

311.4.2 Improperly destroyed effective media files and logs A B C D E F

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 7% OF WATCHSTATION.

311.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What other emergencies or malfunctions may occur if immediate action is not taken?
F. What follow-up action is required?
G. Satisfactorily perform or simulate the immediate action for this emergency.

Questions

311.5.1 Virus infected media A B C D E F G

_____
(Signature and Date)

.2 Compromise A B C D E F G

_____
(Signature and Date)

COMPLETED .5 AREA COMPRISES 7% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

311 MEDIA CLERK (CONT'D)

311.6 WATCHES

311.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Media Clerk (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 10% OF WATCHSTATION.

311.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

311.7.1 EXAMINATIONS Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

312 HELPDESK TECHNICIAN

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified HELPDESK TECHNICIAN (NAVEDTRA 43355-F).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

312 HELPDESK TECHNICIAN

Estimated completion time: 16 weeks

312.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

312.1.1 COURSES:

Navy E-Learning: Hardware - Devices and System Components (14940 Part 1)

Completed _____
(Qualifier and Date)

Navy E-Learning: Hardware - Installation and Troubleshooting (14941 Part 2)

Completed _____
(Qualifier and Date)

Navy E-Learning: Hardware - Printers, Networks, and Protocols (14942 Part 3)

Completed _____
(Qualifier and Date)

Navy E-Learning: OS Technologies - Installing (14943 Part 1)

Completed _____
(Qualifier and Date)

Navy E-Learning: OS Technologies - Configuring and Managing (14944 Part 2)

Completed _____
(Qualifier and Date)

Navy E-Learning: OS Technologies - Troubleshooting (14945 Part 3)

Completed _____
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

312 HELPDESK TECHNICIAN (CONT'D)

312.1.1 Navy E-Learning: OS Technologies - Network Fundamentals (14946 Part 4)

Completed _____
(Qualifier and Date)

Customer Service Manual (NAVEDTRA 14056)

Completed _____
(Qualifier and Date)

.2 WATCHSTATIONS FROM THIS PQS:

311 Media Clerk

Completed _____
(Qualifier and Date)

.3 FUNDAMENTALS FROM THIS PQS:

101 Safety Precautions

Completed _____ 11% of Watchstation
(Qualifier and Date)

103 Power Distribution

Completed _____ 1% of Watchstation
(Qualifier and Date)

124 Networking

Completed _____ 3% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

312 HELPDESK TECHNICIAN (CONT'D)

312.1.3 125 Defense Messaging System (DMS)

Completed _____ 16% of Watchstation
(Qualifier and Date)

126 Naval Tactical Command Support Systems (NTCSS)

Completed _____ 4% of Watchstation
(Qualifier and Date)

127 Combined Enterprise Regional Information Exchange System (CENTRIXS)

Completed _____ 7% of Watchstation
(Qualifier and Date)

128 Collaboration at Sea (CAS)

Completed _____ 4% of Watchstation
(Qualifier and Date)

129 Global Command and Control System – Maritime (GCCS-M)

Completed _____ 5% of Watchstation
(Qualifier and Date)

.4 SYSTEMS FROM THIS PQS:

225 Networking

Completed _____ 2% of Watchstation
(Qualifier and Date)

226 Integrated Shipboard Networking System (ISNS)

Completed _____ 3% of Watchstation
(Qualifier and Date)

227 Naval Tactical Command Support Systems (NTCSS)

Completed _____ 2% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

312 HELPDESK TECHNICIAN (CONT'D)

312.1.4 228 Global Command and Control System – Maritime (GCCS-M)

Completed _____ 3% of Watchstation
(Qualifier and Date)

229 Combined Enterprise Regional Information Exchange System (CENTRIXS)

Completed _____ 2% of Watchstation
(Qualifier and Date)

230 Defense Messaging Dissemination System (DMDS)

Completed _____ 2% of Watchstation
(Qualifier and Date)

231 Collaboration at Sea (CAS)

Completed _____ 2% of Watchstation
(Qualifier and Date)

312.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. Satisfactorily perform this task.

Questions

312.2.1 Replace motherboard A B E F

_____
(Signature and Date)

.2 Install device driver A B E F

_____
(Signature and Date

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

		Questions
312.2.3	Run Event Viewer and show application, security, and system logs	A B E F
	_____ (Signature and Date	
.4	Show active applications, processes and performance using Task Manager	A B E F
	_____ (Signature and Date)	
.5	Reseat RAM	A B E F
	_____ (Signature and Date)	
.6	Replace power supply	A B E F
	_____ (Signature and Date)	
.7	Replace CD-ROM or floppy drive	A B E F
	_____ (Signature and Date)	
.8	Replace and clone HDD	A B E F
	_____ (Signature and Date)	
.9	Install new NIC	A B E F
	_____ (Signature and Date)	
.10	Terminate and replace RJ-45 connectors on CAT-5 cable	A B D E F
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

312 HELPDESK TECHNICIAN (CONT'D)

		Questions
312.2.11	Power up computer system	A E F
	_____ (Signature and Date)	
.12	Run check disk	A B C F
	_____ (Signature and Date)	
.13	Copy a file	A F
	_____ (Signature and Date)	
.14	Defrag hard drive	A B C E F
	_____ (Signature and Date)	
.15	Create a file	A F
	_____ (Signature and Date)	
.16	Delete a file	A F
	_____ (Signature and Date)	
.17	Rename a file	A F
	_____ (Signature and Date)	
.18	Logoff the system	A F
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

312 HELPDESK TECHNICIAN (CONT'D)

		Questions
312.2.19	Perform shutdown of the system	A B C D E F
	_____ (Signature and Date)	
.20	Power up peripheral equipment	A B E F
	_____ (Signature and Date)	
.21	Change printer cartridge	A B E F
	_____ (Signature and Date)	
.22	Print a file	A F
	_____ (Signature and Date)	
.23	Print a test page	A B F
	_____ (Signature and Date)	
.24	Cancel a print request	A B F
	_____ (Signature and Date)	
.25	Show print queue	A F
	_____ (Signature and Date)	
.26	Map a printer	A B F
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

		Questions
312.2.27	Share a printer	A B F
	_____ (Signature and Date)	
.28	Add computer to domain	A B F
	_____ (Signature and Date)	
.29	Create new user and mailbox account	A B F
	_____ (Signature and Date)	
.30	Reset users profile	A B F
	_____ (Signature and Date)	
.31	Change users password	A B F
	_____ (Signature and Date)	
.32	Unlock user account	A B F
	_____ (Signature and Date)	
.33	Create and/or map Personal Outlook file	A B F
	_____ (Signature and Date)	
.34	Map a network drive	A B F
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

		Questions
312.2.35	Change file permissions	A B F
	_____ (Signature and Date)	
.36	Demonstrate constant ping	A B D F
	_____ (Signature and Date)	
.37	Demonstrate basic knowledge of Windows CMD prompts (or UNIX equivalent) a. nslookup b. ipconfig c. ping d. traceroute e. netstat	A B E F
	_____ (Signature and Date)	
.38	Install software from PPL	A B C E F
	_____ (Signature and Date)	
.39	Uninstall software	A B C E F
	_____ (Signature and Date)	
.40	Install video card	A B C E F
	_____ (Signature and Date)	
.41	Complete unassisted OS install	A B C D E F
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

312 HELPDESK TECHNICIAN (CONT'D)

		Questions
312.2.42	Complete a manual OS install	A B C D E F
	_____ (Signature and Date)	
.43	Install the latest security patches and software updates	A B C D E F
	_____ (Signature and Date)	
.44	Slipstream an installation package	A B C D E F
	_____ (Signature and Date)	
.45	Build a new clone disk	A B C D E F
	_____ (Signature and Date)	

COMPLETED .2 AREA COMPRISES 20% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

312 HELPDESK TECHNICIAN (CONT'D)

312.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What conditions require this infrequent task?
D. Satisfactorily perform or simulate this infrequent task.

		Questions
312.3.1	Change the system time/date	A C D
	_____ (Signature and Date)	
.2	Update and configure BIOS	A B C D
	_____ (Signature and Date)	
.3	Create system partitions	A B C D
	_____ (Signature and Date)	
.4	Respond to IO errors	A B C D
	_____ (Signature and Date)	

COMPLETED .3 AREA COMPRISES 2% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

312 HELPDESK TECHNICIAN (CONT'D)

312.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What emergencies or malfunctions may occur if immediate action is not taken?
F. How does this condition affect other operations/equipment/watchstations?
G. What follow-up action is required?
H. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

Questions

312.4.1 Loss of power A B C D E F G H

_____
(Signature and Date)

.2 Detection of a computer virus A B C D E F G H

_____
(Signature and Date)

.3 Compromise of password A B C D E F G H

_____
(Signature and Date)

.4 Loss of connectivity with servicing communications center A B C D E F G H

_____
(Signature and Date)

.5 Non-delivery/late delivery of messages/e-mail A B C D E F G H

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

		Questions
312.4.6	System/peripherals lockup/malfunction	A B C D E F G H

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 3% OF WATCHSTATION.

312.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What other emergencies or malfunctions may occur if immediate action is not taken?
F. How does this emergency affect other operations/equipment/watchstations?
G. Satisfactorily perform or simulate the immediate action for this emergency.

		Questions
312.5.1	Loss of electrical power	A B C D E F G

_____
(Signature and Date)

.2	Fire/smoke/fumes	A B C D E F G

_____
(Signature and Date)

.3	Flooding of space	A B C D E F G

_____
(Signature and Date)

.4	Loss of air-conditioning	A B C D E F G

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

312 HELPDESK TECHNICIAN (CONT'D)

Questions

312.5.5 Electrical shock — A B C D E F G

_____
(Signature and Date)

COMPLETED .5 AREA COMPRISES 3% OF WATCHSTATION.

312.6 WATCHES

312.6.1 STAND THE FOLLOWING WATCHES UNDER INSTRUCTION:

Helpdesk Tech (5 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

312 HELPDESK TECHNICIAN (CONT'D)

312.6.2 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Helpdesk Tech (5 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 5% OF WATCHSTATION.

312.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

312.7.1 EXAMINATIONS Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

313 HELPDESK SUPERVISOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified HELPDESK SUPERVISOR (NAVEDTRA 43355-F).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

313 HELPDESK SUPERVISOR

Estimated completion time: 4 weeks

313.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

313.1.1 WATCHSTATIONS FROM THIS PQS:

312 Helpdesk Technician

Completed _____
(Qualifier and Date)

.2 FUNDAMENTALS FROM THIS PQS:

107 Message Text Format/Handling

Completed _____ 25% of Watchstation
(Qualifier and Date)

130 Network Operations Center (NOC)

Completed _____ 8% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

313 HELPDESK SUPERVISOR (CONT'D)

313.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. Satisfactorily perform this task.

		Questions
313.2.1	Assign trouble ticket to help desk technician	A D E F
	_____ (Signature and Date)	
.2	Close trouble ticket in trouble ticket log/database	A E F
	_____ (Signature and Date)	
.3	Manage Helpdesk trouble ticket log/database	A B E F
	_____ (Signature and Date)	
.4	Maintain daily supervisor log	A E F
	_____ (Signature and Date)	
.5	Administer and supervise training	A E F
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

313 HELPDESK SUPERVISOR (CONT'D)

		Questions
313.2.6	Supervise Helpdesk technicians	A B C D F

_____
(Signature and Date)

Completed .2 area comprises 15% of watchstation.

313.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What conditions require this infrequent task?
F. Satisfactorily perform or simulate this infrequent task.

		Questions
313.3.1	Report security violations	A B C D E F

_____
(Signature and Date)

.2	Maintain AIS hardware and software inventory	A B C D E F

_____
(Signature and Date)

.3	Verify network layout and workstation requirements	A E F

_____
(Signature and Date)

COMPLETED .3 AREA COMPRISES 8% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

313 HELPDESK SUPERVISOR (CONT'D)

313.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What emergencies or malfunctions may occur if immediate action is not taken?
F. How does this condition affect other operations/equipment/watchstations?
G. What follow-up action is required?
H. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

		Questions
313.4.1	Computer virus	A B C D E F G H
	_____ (Signature and Date)	
.2	Degraded/inoperable equipment	A B C D E F G H
	_____ (Signature and Date)	
.3	Compromise of password	A B C D E F G H
	_____ (Signature and Date)	
.4	Loss of trouble ticket log	A B C D E F G H
	_____ (Signature and Date)	

COMPLETED .4 AREA COMPRISES 10% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

313 HELPDESK SUPERVISOR (CONT'D)

313.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What other emergencies or malfunctions may occur if immediate action is not taken?
F. How does this emergency affect other operations/equipment/watchstations?
G. Satisfactorily perform or simulate the immediate action for this emergency.

		Questions
313.5.1	Loss of electrical power	A B C D E F G
	_____ (Signature and Date)	
.2	Fire/smoke/fumes	A B C D E F G
	_____ (Signature and Date)	
.3	Flooding of space	A B C D E F G
	_____ (Signature and Date)	
.4	Loss of air-conditioning	A B C D E F G
	_____ (Signature and Date)	
.5	Electrical shock	A B C D E F G
	_____ (Signature and Date)	

COMPLETED .5 AREA COMPRISES 13% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

313 HELPDESK SUPERVISOR (CONT'D)

313.6 WATCHES

313.6.1 STAND THE FOLLOWING WATCHES UNDER INSTRUCTION:

Helpdesk Supervisor (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.2 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Helpdesk Supervisor (5 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 21% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

313 HELPDESK SUPERVISOR (CONT'D)

313.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

313.7.1 EXAMINATIONS Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

314 DEFENSE MESSAGING SYSTEM (DMS) OPERATOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified DEFENSE MESSAGING SYSTEM (DMS) OPERATOR (NAVEDTRA 43355-F).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

314 DEFENSE MESSAGING SYSTEM (DMS) OPERATOR

Estimated completion time: 6 weeks

314.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

314.1.1 PQS QUALIFICATIONS:

Electronic Key Material System (EKMS) (NAVEDTRA 43462-1A)
301 EKMS User

Completed _____
(Qualifier and Date)

.2 WATCHSTATIONS FROM THIS PQS:

311 Media Clerk

Completed _____
(Qualifier and Date)

.3 FUNDAMENTALS FROM THIS PQS:

101 Safety Precautions

Completed _____ 16% of Watchstation
(Qualifier and Date)

103 Power Distribution

Completed _____ 1% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

314 DEFENSE MESSAGING SYSTEM (DMS) OPERATOR (CONT'D)

314.1.3 107 Message Text Format/Handling

Completed _____ 7% of Watchstation
(Qualifier and Date)

108 Minimize

Completed _____ 6% of Watchstation
(Qualifier and Date)

124 Networking

Completed _____ 4% of Watchstation
(Qualifier and Date)

125 Defense Messaging System (DMS)

Completed _____ 23% of Watchstation
(Qualifier and Date)

.4 SYSTEMS FROM THIS PQS:

225 Networking

Completed _____ 3% of Watchstation
(Qualifier and Date)

230 Defense Messaging Dissemination System (DMDS)

Completed _____ 3% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

314 DEFENSE MESSAGING SYSTEM (DMS) OPERATOR (CONT'D)

314.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. Satisfactorily perform this task.

		Questions
314.2.1	Power up peripheral equipment	A E F
	_____ (Signature and Date)	
.2	Start up system	A B E F
	_____ (Signature and Date)	
.3	Demonstrate different techniques for creating a new DMS message	A B F
	_____ (Signature and Date)	
.4	Demonstrate opening the Personal Address Book	A B D F
	_____ (Signature and Date)	
.5	Demonstrate the proper procedures for FORTEZZA Logon	A B F
	_____ (Signature and Date)	
.6	Demonstrate requesting Delivery and Read Receipt of DMS message	A B F
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

		Questions
314.2.7	Demonstrate finding the MTS-ID	A B F
	_____ (Signature and Date)	
.8	Demonstrate Personal Address Book synchronization	A B F
	_____ (Signature and Date)	
.9	Demonstrate creating an Outlook profile	A B D F
	_____ (Signature and Date)	
.10	Demonstrate loading and configuring Master Key Plus	A B D F
	_____ (Signature and Date)	
.11	Demonstrate deleting the DMS security cache	A B F
	_____ (Signature and Date)	
.12	Demonstrate deleting the DMS from cache	A B F
	_____ (Signature and Date)	
.13	Perform daily backups	A B C D E F
	_____ (Signature and Date)	
.14	Logoff the system	A F
	_____ (Signature and Date)	
.15	Perform shutdown of the system	A B C D E F
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

Questions

314.2.16 Perform the following MD functions:

a. Add/delete users — A F

_____
(Signature and Date)

b. Input messages manually — A B F

_____
(Signature and Date)

c. Input messages via automated system — A B F

_____
(Signature and Date)

d. Route messages automatically — A B C D F

_____
(Signature and Date)

e. Route messages manually — A B C D F

_____
(Signature and Date)

f. Perform message search — A B F

_____
(Signature and Date)

g. Perform message trace — A B C F

_____
(Signature and Date)

h. Add a recipient address to a message — A B F

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

			Questions
314.2.16	i.	Perform address lookup using DIT	A B D F
		_____ (Signature and Date)	
	j.	Perform database maintenance	A B C F
		_____ (Signature and Date)	
.17	Perform the following message processing functions:		
	a.	Verify completeness of outgoing messages	A B F
		_____ (Signature and Date)	
	b.	Verify all addresses against DIT	A B F
		_____ (Signature and Date)	
	c.	Maintain message logs	A B F
		_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

			Questions
314.2.17	d.	Successfully logon with FORTEZZA	A B D F
		_____ (Signature and Date)	
	e.	Send signed and encrypted messages	A B D F
		_____ (Signature and Date)	
	f.	Log MTS-ID of message	A B F
		_____ (Signature and Date)	
	g.	Deliver outgoing messages to designated circuits for transmission	A B D F
		_____ (Signature and Date)	
.18		Submit DMS trouble ticket	A B C D F
		_____ (Signature and Date)	

COMPLETED .2 AREA COMPRISES 23% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

314 DEFENSE MESSAGING SYSTEM (DMS) OPERATOR (CONT'D)

314.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What conditions require this infrequent task?
F. Satisfactorily perform or simulate this infrequent task.

		Questions
314.3.1	Process messages during minimize	A B C D E F
	_____ (Signature and Date)	
.2	Process messages requiring special handling (2 times)	A B C D E F
	_____ (Signature and Date)	
	_____ (Signature and Date)	
.3	Change the system time/date	A E F
	_____ (Signature and Date)	

COMPLETED .3 AREA COMPRISES 3% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

314 DEFENSE MESSAGING SYSTEM (DMS) OPERATOR (CONT'D)

314.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What emergencies or malfunctions may occur if immediate action is not taken?
F. How does this condition affect other operations/equipment/watchstations?
G. What follow-up action is required?
H. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

Questions

314.4.1 Loss of power A B C D E F G H

_____
(Signature and Date)

.2 Computer virus A B C D E F G H

_____
(Signature and Date)

.3 Compromise of password A B C D E F G H

_____
(Signature and Date)

.4 Loss of connectivity with servicing communications center A B C D E F G H

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

314 DEFENSE MESSAGING SYSTEM (DMS) OPERATOR (CONT'D)

Questions:

314.4.5 Loss of connectivity between AST and AIS — A B C D E F G H

_____
(Signature and Date)

.6 Non-delivery/late delivery of messages — A B C D E F G H

_____
(Signature and Date)

.7 System/peripherals lockup/malfunction — A B C D E F G H

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 5% OF WATCHSTATION.

314.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What other emergencies or malfunctions may occur if immediate action is not taken?
F. How does this emergency affect other operations/equipment/watchstations?
G. Satisfactorily perform or simulate the immediate action for this emergency.

Questions

314.5.1 Loss of electrical power — A B C D E F G

_____
(Signature and Date)

.2 Fire/smoke/fumes — A B C D E F G

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

Questions

314.5.3 Flooding of space A B C D E F G

_____
(Signature and Date)

.4 Loss of air-conditioning A B C D E F G

_____
(Signature and Date)

.5 Electrical shock A B C D E F G

_____
(Signature and Date)

COMPLETED .5 AREA COMPRISES 4% OF WATCHSTATION.

314.6 WATCHES

314.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Defense Messaging Systems (DMS) Operator (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 2% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

314 DEFENSE MESSAGING SYSTEM (DMS) OPERATOR (CONT'D)

314.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

314.7.1 EXAMINATIONS Pass a written examination

_____

(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____

(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

315 NETWORK OPERATOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified NETWORK OPERATOR (NAVEDTRA 43355-F).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

315 NETWORK OPERATOR

Estimated completion time: 8 weeks

315.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

315.1.1 COURSES:

Navy E-Learning: Network + Pt 1 Media & Topologies (14181)

Completed _____
(Qualifier and Date)

Navy E-Learning: Network+ Pt 2 Protocols (14182)

Completed _____
(Qualifier and Date)

Navy E-Learning: Network+ Pt 3 Implementation (14183)

Completed _____
(Qualifier and Date)

.2 WATCHSTATIONS FROM THIS PQS:

313 Helpdesk Supervisor

Completed _____
(Qualifier and Date)

.3 FUNDAMENTALS FROM THIS PQS:

108 Minimize

Completed _____ 17% of Watchstation
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

315 NETWORK OPERATOR (CONT'D)

315.1.4 SYSTEMS FROM THIS PQS:

210 Battle Force Email (BFEM)

Completed _____ 8% of Watchstation
(Qualifier and Date)

315.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. Satisfactorily perform this task.

		Questions
315.2.1	Conduct daily backups	A E F

_____
(Signature and Date)

.2	Power up router/switch	A B E F

_____
(Signature and Date)

.3	Restore from a back up device (3 times)	A B C D E F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

315 NETWORK OPERATOR (CONT'D)

		Questions
315.2.4	Perform daily system checks	A B C D E F
	_____ (Signature and Date)	
.5	Logon the system	A F
	_____ (Signature and Date)	
.6	Logoff the system	A F
	_____ (Signature and Date)	
.7	Perform system start up	A B C D E F
	_____ (Signature and Date)	
.8	Perform system shut down	A B C D E F
	_____ (Signature and Date)	
.9	Check router/switch interfaces	A B F
	_____ (Signature and Date)	
.10	Modify router/switch interfaces	A B C E F
	_____ (Signature and Date)	
.11	TELNET/SSH into router/switch	A B C E F
	_____ (Signature and Date)	

COMPLETED .2 AREA COMPRISES 28% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

315 NETWORK OPERATOR (CONT'D)

315.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What conditions require this infrequent task?
F. Satisfactorily perform or simulate this infrequent task.

		Questions
315.3.1	Reload router/switch configuration files	A B C D E F
	_____ (Signature and Date)	
.2	Change/Verify router port status (2 times)	A B C D E F
	_____ (Signature and Date)	
	_____ (Signature and Date)	
.3	Change the system time/date	A E F
	_____ (Signature and Date)	

COMPLETED .3 AREA COMPRISES 8% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

315 NETWORK OPERATOR (CONT'D)

315.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What emergencies or malfunctions may occur if immediate action is not taken?
F. How does this condition affect other operations/equipment/watchstations?
G. What follow-up action is required?
H. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

Questions

315.4.1 Loss of power A B C D E F G H

_____
(Signature and Date)

.2 Computer virus A B C D E F G H

_____
(Signature and Date)

.3 Compromise of password A B C D E F G H

_____
(Signature and Date)

.4 Loss of connectivity with servicing communications center A B C D E F G H

_____
(Signature and Date)

.5 System/peripherals lockup/malfunction A B C D E F G H

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 11% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

315 NETWORK OPERATOR (CONT'D)

315.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What other emergencies or malfunctions may occur if immediate action is not taken?
F. How does this emergency affect other operations/equipment/watchstations?
G. Satisfactorily perform or simulate the immediate action for this emergency.

		Questions
315.5.1	Loss of electrical power	A B C D E F G
	_____ (Signature and Date)	
.2	Fire/smoke/fumes	A B C D E F G
	_____ (Signature and Date)	
.3	Flooding of space	A B C D E F G
	_____ (Signature and Date)	
.4	Loss of air-conditioning	A B C D E F G
	_____ (Signature and Date)	
.5	Electrical shock	A B C D E F G
	_____ (Signature and Date)	

COMPLETED .5 AREA COMPRISES 11% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

315 NETWORK OPERATOR (CONT'D)

315.6 WATCHES

315.6.1 STAND THE FOLLOWING WATCHES UNDER INSTRUCTION:

Network Operator (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.2 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Network Operator (5 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 17% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

315 NETWORK OPERATOR (CONT'D)

315.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

315.7.1 EXAMINATIONS Pass a written examination

_____

(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____

(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

316 NETWORK ADMINISTRATOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified NETWORK ADMINISTRATOR (NAVEDTRA 43355-F).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

316 NETWORK ADMINISTRATOR

Estimated completion time: 12 weeks

316.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

316.1.1 SCHOOLS:

Journeyman Network Course (JNC) (A-531-0046) (Recommended)

Completed _____
(Qualifier and Date)

.2 COURSES:

Navy E-Learning: CompTIA Security+ Part 1 - Security Concepts (14804)

Completed _____
(Qualifier and Date)

Navy E-Learning: CompTIA Security+ Part 2 - Communication Security (14805)

Completed _____
(Qualifier and Date)

Navy E-Learning: CompTIA Security+ Part 3 - Infrastructure Security (14806)

Completed _____
(Qualifier and Date)

Navy E-Learning: CompTIA Security+ Part 4 - Cryptography and Operational Security (14807)

Completed _____
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

316 NETWORK ADMINISTRATOR (CONT'D)

316.1.3 OTHER:

Pass COMPTIA Security+ exam to obtain DOD Level 1 access requirements

Completed _____
(Qualifier and Date)

.4 WATCHSTATIONS FROM THIS PQS:

315 Network Operator

Completed _____
(Qualifier and Date)

316.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. Satisfactorily perform this task.

		Questions
316.2.1	Manage daily/weekly backups	A B E F
	_____ (Signature and Date)	
.2	Create router/switch configuration file	A B E F
	_____ (Signature and Date)	
.3	Save/Copy router/switch configuration file	A B E F
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

		Questions
316.2.4	Modify router/switch configuration file	A B E F
	_____ (Signature and Date)	
.5	Modify router Access Control List	A B C E F
	_____ (Signature and Date)	
.6	Add, modify, delete user groups or domains	A B F
	_____ (Signature and Date) (Simulate Delete)	
.7	Create OU	A B F
	_____ (Signature and Date)	
.8	Set OU permissions	A B F
	_____ (Signature and Date)	
.9	Create group policy	A B F
	_____ (Signature and Date)	
.10	Implement group policy	A B F
	_____ (Signature and Date)	
.11	Create security group	A B F
	_____ (Signature and Date)	
.12	Implement security group	A B F
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

		Questions
316.2.13	Create distribution group	A B F
	_____ (Signature and Date)	
.14	Implement distribution group	A B F
	_____ (Signature and Date)	
.15	Change owner of distribution group	A B F
	_____ (Signature and Date)	
.16	Move an OU	A B F
	_____ (Signature and Date)	
.17	Determine connectivity between a client and server	A B F
	_____ (Signature and Date)	
.18	List/Modify host files	A B F
	_____ (Signature and Date)	
.19	Reboot LAN servers	A B E F
	_____ (Signature and Date)	
.20	Verify network configuration	A B E F
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

		Questions
316.2.21	Verify email configuration	A B F
	_____ (Signature and Date)	
.22	Verify proxy configuration	A B F
	_____ (Signature and Date)	
.23	Stop and start exchange services	A B F
	_____ (Signature and Date)	
.24	Stop and start proxy services	A B F
	_____ (Signature and Date)	
.25	Set River City conditions	A B F
	_____ (Signature and Date)	
.26	Manage DHCP services	A B C D E F
	_____ (Signature and Date)	
.27	Manage DNS services	A B C D E F
	_____ (Signature and Date)	
.28	Manage WINS services	A B C D E F
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

		Questions
316.2.29	Manage VLANs	A B C D E F
	_____ (Signature and Date)	
.30	Monitor network status	A B C F
	_____ (Signature and Date)	
.31	Manage Exchange and Active Directory	
	a. Add/delete/modify/move user	A B C D E F
	_____ (Signature and Date)	
	b. Add/delete/modify/move mailbox	A B C D E F
	_____ (Signature and Date)	
	c. Create/implement Exchange policies	A B C D E F
	_____ (Signature and Date)	
	d. Create/implement group policies	A B C D E F
	_____ (Signature and Date)	
	e. Create/set permissions public folders	A B C D E F
	_____ (Signature and Date)	
	f. Run Cleanup Agent	A B C D E F
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

Questions

316.2.31 g. Enable/disable accounts/mailboxes A B C D E F

_____
(Signature and Date)

.32 Perform remote access of network workstations A B C D F

_____
(Signature and Date)

.33 Notify Chain of Command of degraded system performance A B C D F

_____
(Signature and Date)

.34 Load server software in a test environment A B C D E F

_____
(Signature and Date)

.35 Create Active directory sites A B C D E F

_____
(Signature and Date)

.36 Promote a server to domain controller (dcpromo) A B C D E F

_____
(Signature and Date)

.37 Create security templates A B C D E F

_____
(Signature and Date)

.38 Load security templates into group policies A B C D E F

_____
(Signature and Date)

.39 Verify user security settings via group policies A B C D E F

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

		Questions
316.2.40	Verify computer security settings via group policies	A B C D E F

_____
(Signature and Date)

.41	Verify security via gpresult	A B C D E F

_____
(Signature and Date)

.42	Verify security settings via Resultant Set of Policy	A B C D E F

_____
(Signature and Date)

.43	Disable unnecessary system services	A B C D E F

_____
(Signature and Date)

.44	Harden system security	A B C D E F

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 59% OF WATCHSTATION.

316.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What conditions require this infrequent task?
F. Satisfactorily perform or simulate this infrequent task.

		Questions
316.3.1	Verify LAN card configuration	A B D E F

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

316 NETWORK ADMINISTRATOR (CONT'D)

		Questions
316.3.2	Reload LAN server	A B C D E F
	_____ (Signature and Date)	
.3	Perform software/security push	A E F
	_____ (Signature and Date)	
.4	Respond to INFOCON drills	A B C D E F
	_____ (Signature and Date)	
.5	Respond to electronic spillage	A B C D E F
	_____ (Signature and Date)	
.6	Perform Exchange Information Store defragmentation	A B C D E F
	_____ (Signature and Date)	
.7	Rebuild Information Store	A B C E F
	_____ (Signature and Date)	

COMPLETED .3 AREA COMPRISES 11% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

316 NETWORK ADMINISTRATOR (CONT'D)

316.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What emergencies or malfunctions may occur if immediate action is not taken?
F. How does this condition affect other operations/equipment/watchstations?
G. What follow-up action is required?
H. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

Questions

316.4.1 Loss of power A B C D E F G H

_____
(Signature and Date)

.2 Computer virus A B C D E F G H

_____
(Signature and Date)

.3 Compromise of password A B C D E F G H

_____
(Signature and Date)

.4 Loss of connectivity with servicing communications center A B C D E F G H

_____
(Signature and Date)

.5 Non-delivery/late delivery of messages/e-mail A B C D E F G H

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

		Questions
316.4.6	System/peripherals lockup/malfunction	A B C D E F G H

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 9% OF WATCHSTATION.

316.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What other emergencies or malfunctions may occur if immediate action is not taken?
F. How does this emergency affect other operations/equipment/watchstations?
G. Satisfactorily perform or simulate the immediate action for this emergency.

		Questions
316.5.1	Loss of electrical power	A B C D E F G

_____
(Signature and Date)

.2	Fire/smoke/fumes	A B C D E F G

_____
(Signature and Date)

.3	Flooding of space	A B C D E F G

_____
(Signature and Date)

.4	Loss of air-conditioning	A B C D E F G

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

316 NETWORK ADMINISTRATOR (CONT'D)

Questions

316.5.5 Electrical shock A B C D E F G

_____
(Signature and Date)

COMPLETED .5 AREA COMPRISES 7% OF WATCHSTATION.

316.6 WATCHES

316.6.1 STAND THE FOLLOWING WATCHES UNDER INSTRUCTION:

Network Administrator (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

316 NETWORK ADMINISTRATOR (CONT'D)

316.6.2 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Network Administrator (6 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 14% OF WATCHSTATION.

316.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

316.7.1 EXAMINATIONS Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

317 INFORMATION WATCH SUPERVISOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified INFORMATION WATCH SUPERVISOR (NAVEDTRA 43355-F).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

317 INFORMATION WATCH SUPERVISOR

Estimated Completion Time: 8 weeks

317.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

317.1.1 Watchstations from this PQS:

301 Publications Clerk

Completed _____
(Qualifier and Date)

314 Defense Messaging Systems (DMS) Operator

Completed _____
(Qualifier and Date)

316 Network Administrator

Completed _____
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

317 INFORMATION WATCH SUPERVISOR (CONT'D)

317.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. Satisfactorily perform this task.

		Questions
317.2.1	Manage helpdesk operations	A B C D E F
	_____ (Signature and Date)	
.2	Manage network operations	A B C D E F
	_____ (Signature and Date)	
.3	Manage DMS operations	A B C D E F
	_____ (Signature and Date)	
.4	Maintain Master Station Log (or equivalent)	A B C F
	_____ (Signature and Date)	
.5	Utilize OPORDs/COMMPLANs/OPTASKs	A B C D F
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

317 INFORMATION WATCH SUPERVISOR (CONT'D)

		Questions
317.2.6	Correct reported discrepancies	A B C D E F

_____
(Signature and Date)

.7	Maintain overall information security	A B C D E F

_____
(Signature and Date)

.8	Monitor operation of all information watchstations	A B C D E F

_____
(Signature and Date)

.9	Make required reports to appropriate authority	A B C D F

_____
(Signature and Date)

.10	Draft COMSPOT	A B C F

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 43% OF WATCHSTATION.

317.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What control/coordination is required?
C. What means of communications are used?
D. What safety precautions must be observed?
E. What conditions require this infrequent task?
F. Satisfactorily perform or simulate this infrequent task.

		Questions
317.3.1	Execute emergency destruction	A B C D E F

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

317 INFORMATION WATCH SUPERVISOR (CONT'D)

Questions

317.3.2 Implement EAP A B C D E F

_____
(Signature and Date)

.3 Submit battle readiness reports A B C D E F

_____
(Signature and Date)

.4 Draft IP service request message A B C E F

_____
(Signature and Date)

.5 Develop and implement the disaster recovery/contingency plan A B C D E F

_____
(Signature and Date)

COMPLETED .3 AREA COMPRISES 22% OF WATCHSTATION.

317.4 ABNORMAL CONDITIONS– None to be discussed.

317.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What other emergencies or malfunctions may occur if immediate action is not taken?
F. How does this emergency affect other operations/equipment/watchstations?
G. Satisfactorily perform or simulate the immediate action for this emergency.

Questions

317.5.1 Fire A B C D E F G

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

317 INFORMATION WATCH SUPERVISOR (CONT'D)

Questions

317.5.2 Flooding A B C D E F G

_____
(Signature and Date)

.3 Personnel casualty A B C D E F G

_____
(Signature and Date)

COMPLETED .5 AREA COMPRISES 13% OF WATCHSTATION.

317.6 WATCHES

317.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Information Watch Supervisor (5 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 22% OF WATCHSTATION.

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

317 INFORMATION WATCH SUPERVISOR (CONT'D)

317.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

317.7.1 EXAMINATIONS Pass a written examination

_____

(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____

(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

318 COMMUNICATIONS WATCH OFFICER (CWO)

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified COMMUNICATIONS WATCH OFFICER (CWO) (NAVEDTRA 43355-F).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

318 COMMUNICATIONS WATCH OFFICER (CWO)

Estimated completion time: 4 weeks

318.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

318.1.1 PQS QUALIFICATIONS:

Special Intelligence (SI) Afloat Communications (NAVEDTRA 43551-3A), 301 Special Intelligence (SI) Communications Operator

Completed _____
(Qualifier and Date)

318.1.2 WATCHSTATIONS FROM THIS PQS:

301 Publications Clerk

Completed _____
(Qualifier and Date)

302 Naval Modular Automated Communications System (NAVMACS) V-2 Operator

Completed _____
(Qualifier and Date)

303 Naval Modular Automated Communications System II (NAVMACS II) Operator

Completed _____
(Qualifier and Date)

304 Communications Security (COMSEC) Equipment Operator

Completed _____
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

318 COMMUNICATIONS WATCH OFFICER (CWO) (CONT'D)

318.1.2 305 Message Processing Center (MPC) Supervisor

Completed _____
(Qualifier and Date)

306 Tactical Transmitter/Receiver/Transceiver Operator

Completed _____
(Qualifier and Date)

307 Ultra High Frequency (UHF) Satellite Communications (SATCOM) Systems Operator

Completed _____
(Qualifier and Date)

308 Extremely High Frequency (EHF) Satellite Communications (SATCOM) Systems Operator

Completed _____
(Qualifier and Date)

309 Super High Frequency (SHF) Satellite Communications (SATCOM) Systems Operator

Completed _____
(Qualifier and Date)

310 Transmission System Technician (TST) Supervisor

Completed _____
(Qualifier and Date)

317 Information Watch Supervisor

Completed _____
(Qualifier and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

318 COMMUNICATIONS WATCH OFFICER (CWO) (CONT'D)

318.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. What parameters/operating limits must be monitored?
G. Satisfactorily perform this task.

		Questions
318.2.1	Coordinate functions of MPC	A B C D E F G
	_____ (Signature and Date)	
.2	Coordinate functions of technical control	A B C D E F G
	_____ (Signature and Date)	
.3	Coordinate functions of Information Systems	A B C D E F G
	_____ (Signature and Date)	
.4	Maintain Master Station log (or equivalent)	A B C F G
	_____ (Signature and Date)	
.5	Verify watch team is utilizing OPORDs/COMMPLANs/OPTASKs	A B C D F G
	_____ (Signature and Date)	

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

318 COMMUNICATIONS WATCH OFFICER (CWO) (CONT'D)

		Questions
318.2.6	Correct reported discrepancies	A B C D E F G

_____
(Signature and Date)

.7	Maintain overall security of spaces	A B C D E F G

_____
(Signature and Date)

.8	Monitor operation of all watchstations	A B C D E F G

_____
(Signature and Date)

.9	Make required reports to appropriate authority	A B C D G

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 45% OF WATCHSTATION.

318.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What control/coordination is required?
C. What means of communications are used?
D. What safety precautions must be observed?
E. What conditions require this infrequent task?
F. Satisfactorily perform or simulate this infrequent task.

		Questions
318.3.1	Execute emergency destruction	A B C D E F

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

318 COMMUNICATIONS WATCH OFFICER (CWO) (CONT'D)

Questions:

318.3.2 Implement EAP A B C D E F

_____
(Signature and Date)

.3 Submit battle readiness reports A B C D E F

_____
(Signature and Date)

COMPLETED .3 AREA COMPRISES 15% OF WATCHSTATION.

318.4 ABNORMAL CONDITIONS– None to be discussed.

318.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What other emergencies or malfunctions may occur if immediate action is not taken?
F. How does this emergency affect other operations/equipment/watchstations?
G. Satisfactorily perform or simulate the immediate action for this emergency.

Questions

318.5.1 Fire A B C D E F G

_____
(Signature and Date)

.2 Flooding A B C D E F G

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

318 COMMUNICATIONS WATCH OFFICER (CWO) (CONT'D)

Questions:

318.5.3 Personnel casualty A B C D E F G

_____
(Signature and Date)

COMPLETED .5 AREA COMPRISES 15% OF WATCHSTATION.

318.6 WATCHES

318.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Communications Watch Officer (CWO) (5 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 25% OF WATCHSTATION.

317.8 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

317.8.1 EXAMINATIONS Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____
(Signature and Date)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

QUALIFICATION PROGRESS SUMMARY FOR INFORMATION SYSTEMS AND TELECOMMUNICATIONS (COMMON)

NAME_____ RATE/RANK_____

This qualification progress summary is used to track the progress of a trainee in the watchstations for this PQS and ensure awareness of remaining tasks. It should be kept by the individual or in the individual's training jacket and updated with an appropriate signature (Training Petty Officer, Division Officer, Senior Watch Officer, etc.) as watchstations are completed.

---

301 PUBLICATIONS CLERK

Completed _____ Date_____
(Signature)

---

302 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM (NAVMACS) V-2 OPERATOR

Completed _____ Date_____
(Signature)

---

303 NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II) OPERATOR

Completed _____ Date_____
(Signature)

---

304 COMMUNICATIONS SECURITY (COMSEC) EQUIPMENT OPERATOR

Completed _____ Date_____
(Signature)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

QUALIFICATION PROGRESS SUMMARY FOR INFORMATION SYSTEMS AND TELECOMMUNICATIONS (COMMON) (CONT'D)

305 MESSAGE PROCESSING CENTER (MPC) SUPERVISOR

Completed _____ Date_____
(Signature)

306 TACTICAL TRANSMITTER/RECEIVER/TRANSCEIVER OPERATOR

Completed _____ Date_____
(Signature)

307 ULTRA HIGH FREQUENCY (UHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR

Completed _____ Date_____
(Signature)

308 EXTREMELY HIGH FREQUENCY (EHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR

Completed _____ Date_____
(Signature)

309 SUPER HIGH FREQUENCY (SHF) SATELLITE COMMUNICATIONS (SATCOM) SYSTEMS OPERATOR

Completed _____ Date_____
(Signature)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

QUALIFICATION PROGRESS SUMMARY FOR INFORMATION SYSTEMS AND TELECOMMUNICATIONS (COMMON) (CONT'D)

310 TRANSMISSION SYSTEM TECHNICIAN (TST) SUPERVISOR

Completed _____ Date_____

(Signature)

311 MEDIA CLERK

Completed _____ Date_____

(Signature)

312 HELPDESK TECHNICIAN

Completed _____ Date_____

(Signature)

313 HELPDESK SUPERVISOR

Completed _____ Date_____

(Signature)

314 DEFENSE MESSAGING SYSTEM (DMS) OPERATOR

Completed _____ Date_____

(Signature)

QUALIFICATION PROGRESS SUMMARY FOR INFORMATION SYSTEMS AND TELECOMMUNICATIONS (COMMON) (CONT'D)

315 NETWORK OPERATOR

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

Completed _____ Date_____
(Signature)

316 NETWORK ADMINISTRATOR

Completed _____ Date_____
(Signature)

317 INFORMATION WATCH SUPERVISOR

Completed _____ Date_____
(Signature)

318 COMMUNICATIONS WATCH OFFICER (CWO)

Completed _____ Date_____
(Signature)

NOTE: Answers to questions in this standard may be classified. Handle accordingly if notes are made in this book.

LIST OF REFERENCES USED IN THIS PQS

ACP 113(AF), Call Sign Book for Ships
ACP 125(F), Communication Instructions Radiotelephone Procedures
ACP 126 (C), Communications Instructions Teletypewriter (Teleprinter) Procedures
ACP 131(F), Communications Instructions Operating Signals
ACP 135 (E), Communications Instructions Distress and Rescue Procedures
ACP 220, Multinational Videoconferencing Services
ADMS ST-1000 System Administrator's Guide, Rev. 8
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Combat System Operational Sequencing System (CSOSS)
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Guidelines for the Use and Operation of the TSEC/KW-46 Broadcast Security Equipment, KAO-207B/TSEC Manual
Local Battle Force Electronic Mail System Operating Manual
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Local Security Instructions
Local Standard Operating Procedures (SOP)
Local Subject Matter Expert
Manufacturer's MSDOS Operating Guide
Manufacturer's PC Operating Manual
MDS/MDU User's Guide
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Naval Tactical Command Support System (NTCSS), Systems Administration Manual
NAVEDTRA 14182, Navy Electricity and Electronics Training Series, Module 10-Introduction to Wave Propagation, Transmission Lines, and Antennas
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Networking All-in-One Desk Reference for Dummies, 2nd Edition
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Turboprep User's Manual, Windows, WIN95, WinNT, Version 2.02A-(3)N
Upgrading and Repairing PCs, 17th Edition; ISBN: 0789734044

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